

**S-133-10**

**MINUTEMAN  
WS-133 B**

**REQUIREMENTS  
AND DESCRIPTION**

**WING VI**

**406 831**

**VOLUME 1B**

**FLOW DIAGRAMS**

**OPERATIONAL**

**VANDENBERG AFB**

**USAF**

**AIR FORCE SYSTEM COMMAND  
BALLISTIC SYSTEMS DIVISION**

**D2-30044-1B**

THE **BOEING** COMPANY

CODE IDENT NO. 81205

NUMBER D2-30044-1B

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DESCRIPTION, S-133-10

MODEL NO. WS-133B CONTRACT NO. AF04(694)-266

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United Services Inc.

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ISSUE 147**

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**TECHNICAL PREPARATION BY AGE SYSTEMS ENGINEERING**

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APPROVED BY \_\_\_\_\_

CLASS & DISTR  
APPROVED BY W. J. Dempsey

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REV SYM C

US 4287 9035 ORIG. 8/62

VOL. NO. 1 B OF 9

SECT. \_\_\_\_\_ PAGE Title

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2-8142-2

SECT.

PAGE A

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
A	Complete revision. Volume I divided into Volumes 1A and 1B.	2-15-3	
B	Added pages B, V-1, V-2, V-3, V-4, V-5 & V-6 Revised pages Title, A, i, iv, v, vii, IV-1, IV-2, IV-6, IV-16, IV-17, IV-22	3-5-3	<i>[Signature]</i>
C	Completely Revised to Include Associate Contractors 1.0 & 2.0 Lower Flows. Deleted Section V (VAFB Flows).	5-13-3	<i>[Signature]</i> 5/5/3

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REV SYM C

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D2-30044-1B

SECT.

PAGE B

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
A	Complete revision. Volume I divided into Volumes 1A and 1B.	2-15-3	
B	Added pages B, V-1, V-2, V-3, V-4, V-5 & V-6 Revised pages Title, A, i, iv, v, vii, IV-1, IV-2, IV-6, IV-16, IV-17, IV-22	3-5-3	<i>[Signature]</i>
C	Completely Revised to Include Associate Contractors 1.0 & 2.0 Lower Flows. Deleted Section V (VAFB Flows).	5-13-3	<i>[Signature]</i> 5/5/3

U3 4287 9028 ORIG. 8/62

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REV SYM C

**TOEING**

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PAGE B

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\* Partial data; this information will be expanded in logical packages as developed and approved.

**A. PURPOSE**

The Weapon System Requirements and Description Document presents a detailed functional description of the WS-133B Weapon System in accordance with Task 2.0 of the statement of work, Contract AF04(694)-266. It provides source data for all agencies concerned with the development of equipment elements, facilities criteria, personnel and training requirements, technical manual data, provisioning data and logistics planning.

**B. SCOPE**

This volume contains the master functional flow diagram (Illustration 1) and the lower level functional flow diagrams developed during the System Requirements Analysis for the Operational Weapon System. This analysis was performed in accordance with AF/BSD Exhibit 62-62, utilizing the base line, defined in Task 2.0 of the Statement of Work, as a point of departure.

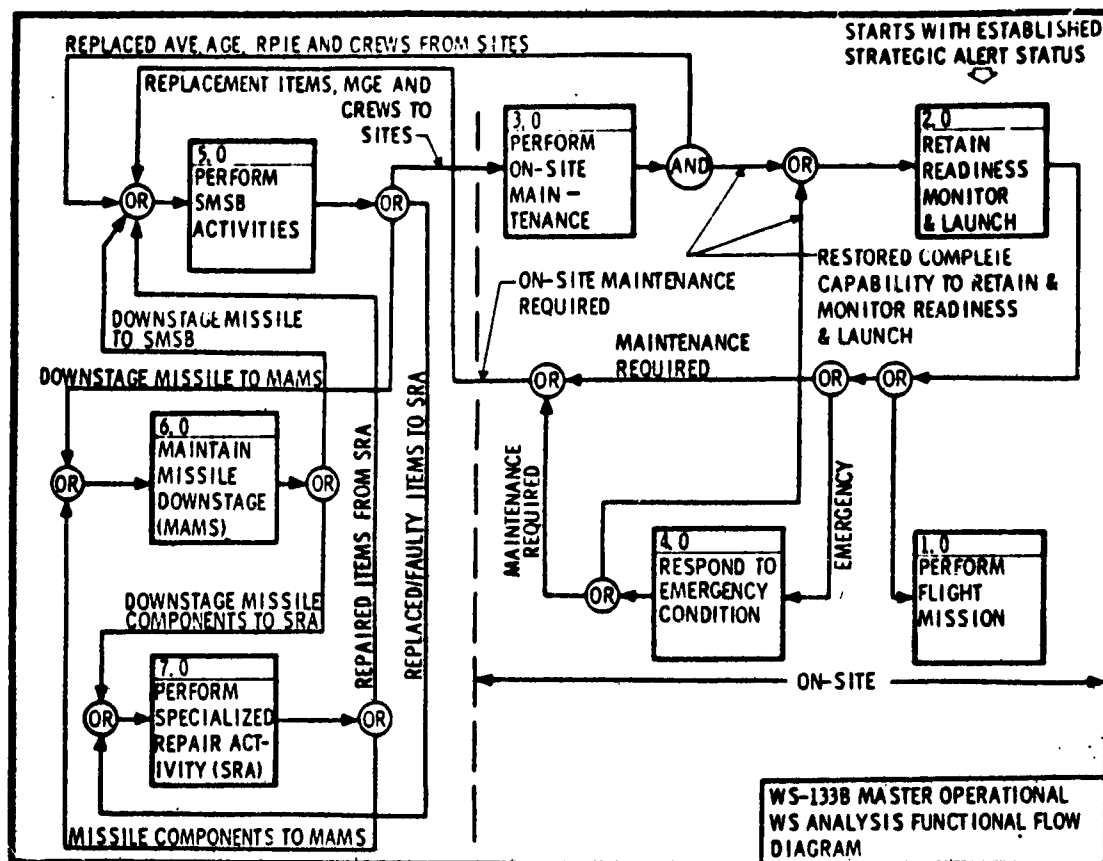
The VAFB Category III Test program functional flow diagrams are contained in Volume 1C.

**C. FUNCTION NUMBERING**

1. Wing VI Operational function numbering is based on the relative level of the flows in descending order.

The first level functions are identified by the master whole number, a decimal point, and the function number, (Example: 1.1 through 1.XX or 4.1 through 4.XXX, etc.). Second level flows contain a second decimal point and the function number, (Example: 5.41.1 through 5.41.1XX, etc.). This system continues through as many levels as necessary to identify the functions.

## WS-133B REQUIREMENTS ANALYSIS MASTER FUNCTIONAL FLOW DIAGRAM - OPERATIONAL



### MASTER OPERATIONAL FUNCTIONAL FLOW DIAGRAM

This flow diagram is the top functional flow for the Wing VI operational weapon system. The sequence of events starts with the missiles installed and in Strategic Alert Status. The flow then proceeds through confidence monitor, missile launch, missile flight, malfunction identification, on-site maintenance and transportation, support base maintenance, missile maintenance, and SRA Maintenance.

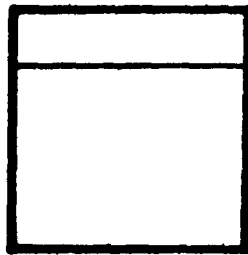
First level and lower level functional flows developed from this master functional flow diagram are presented in Section IV.

### ILLUSTRATION 1

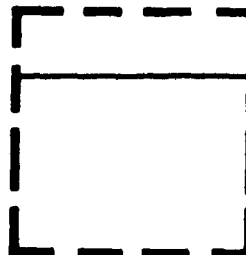


**D. FUNCTIONAL FLOW DIAGRAMS - MECHANICS AND SYMBOLOGY**

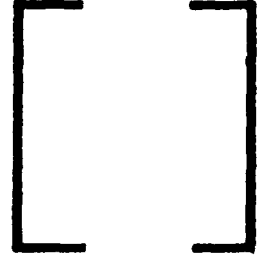
1. Each function is presented in a single box enclosed by a line (for this purpose a function is defined as a discrete identifiable entity causing a particular state or event to occur in the system).



**FIRM FUNCTION  
BLOCK**

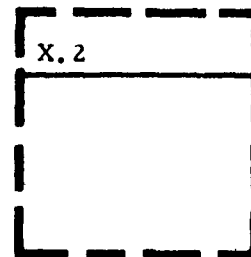
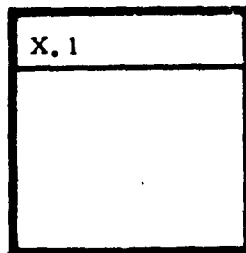


**SOFT FUNCTION  
BLOCK**



**REFERENCE FUNCTION  
BLOCK**

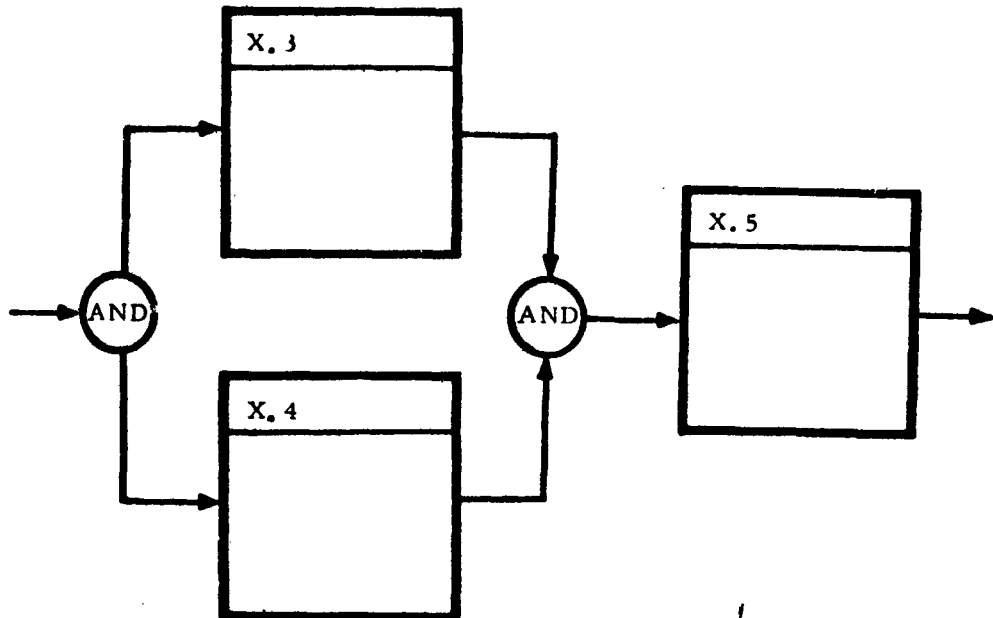
2. Each function is identified by a descriptive title and unique function number on a given flow which appears in the upper portion of the block.



3. Each function is either gross or detailed as required by the level of the flow on which it appears. The first level function identified by whole numbers are defined on the master flow diagram. The lower levels are defined by whole numbers followed by decimals. Form B numbers correspond to the lowest level at which a function is defined on a flow diagram.
4. The solid lines connecting the function blocks represent direction of flow, and do not represent time lapse or intermediate activity.
5. Dotted lines connecting function blocks represent the relationship between non-sequential and specific sequential functions.

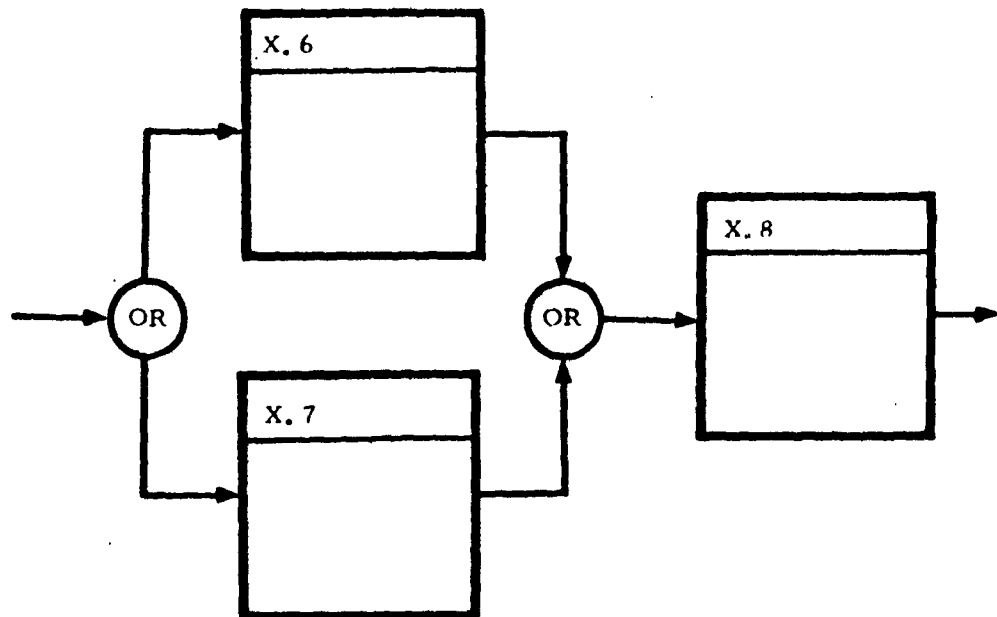
D. (Continued)

6. When two or more functions converge or emanate from a single point, two processes may occur; either an "AND" or an "OR". The process is enclosed in a circle, forming a "gate". The "AND" gate means that all paths of an expansion must be completed. The "OR" gate implies that a decision must be made, since only one path of the expansion need be accomplished to proceed along the flow.



BOTH X.3 AND X.4 MUST BE ACCOMPLISHED  
BEFORE PROCEEDING TO X.5

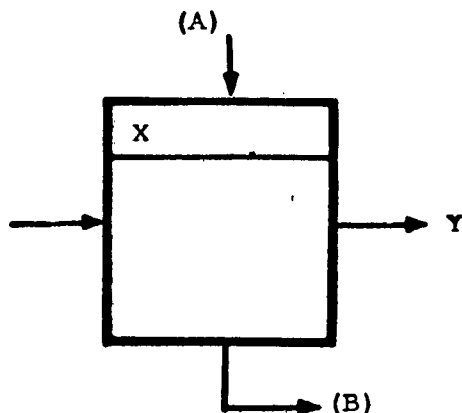
D. (Continued)



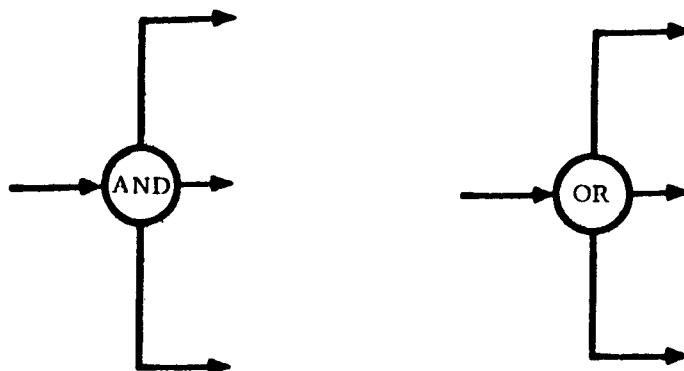
EITHER X. 6 OR X. 7 IS ACCOMPLISHED BEFORE  
PROCEEDING TO X. 8

D. (Continued)

7. Normal flow inputs and outputs are from left to right on the sides of the function blocks. When an input occurs during the performance of a function, it is shown entering the top or bottom of the function block (A). When an output is generated during the performance of a function the output emanates from the top or bottom of the function block (B).



8. When more than two paths converge to or emanate from a gate, the gate symbol is not necessarily repeated.



MULTIPLE GATES

E.

## GLOSSARY OF ABBREVIATIONS

AFSC	Air Force Speciality Code or Air Force Systems Command
AGC	Aerojet General
AGE	Aero-Space Ground Equipment
AMA	Air Material Area
AN.	Autonetics
ATC	Air Training Command
AV	Avco
AVE	Aero-Space Vehicle Equipment
BOEING	The Boeing Company
BSD	Ballistic Systems Division
CEP	Circle of Equal Probability
CFE	Contractor Furnished Equipment
C/O	Checkout
DT & TE	Depot Tooling and Test Equipment
G&C	Guidance and Control
GES	Ground Electronics System
GFE	Government Furnished Equipment
GFP	Government Furnished Property
HPC	Hercules Powder Company, Magna, Utah
LCF	Launch Control Facility
MAMS	Missile Assembly and Maintenance Shops
MCC	Mobile Launch Control Center
MGE	Maintenance Ground Equipment
MLCC	Mobile Launch Control Center
NA	Not Applicable
OGE	Operational Ground Equipment

**F.**

**(Continued)**

<b>PA</b>	<b>Penetration Aids</b>
<b>PAS</b>	<b>Primary Alert System</b>
<b>PROP</b>	<b>Propulsion</b>
<b>RFI</b>	<b>Radio Frequency Interference</b>
<b>RPIE</b>	<b>Real Property Installed Equipment</b>
<b>R/V</b>	<b>Re-entry Vehicle</b>
<b>SAC</b>	<b>Strategic Air Command</b>
<b>SMSB</b>	<b>Strategic Missile Support Base</b>
<b>STL</b>	<b>Space Technology Laboratories, Inc.</b>
<b>SYL</b>	<b>Sylvania</b>
<b>SYL (W)</b>	<b>Sylvania (West)</b>
<b>TAPS</b>	<b>Trajectory Accuracy Prediction System</b>
<b>TCC</b>	<b>Thiokol Chemical Corporation</b>
<b>T-R</b>	<b>Transformer - Rectifier</b>
<b>VAFB</b>	<b>Vandenberg Air Force Base</b>
<b>W/S</b>	<b>Weapon System</b>

# F. VOLUME INDEX

## NOTE

All Volumes in the S-133-10 series are identified by a Boeing document number. The base portion of this number is D2-30044-. To obtain a given volume, add the volume number to the base number. (e.g. Volume 3A is Document No. D2-30044-3A).

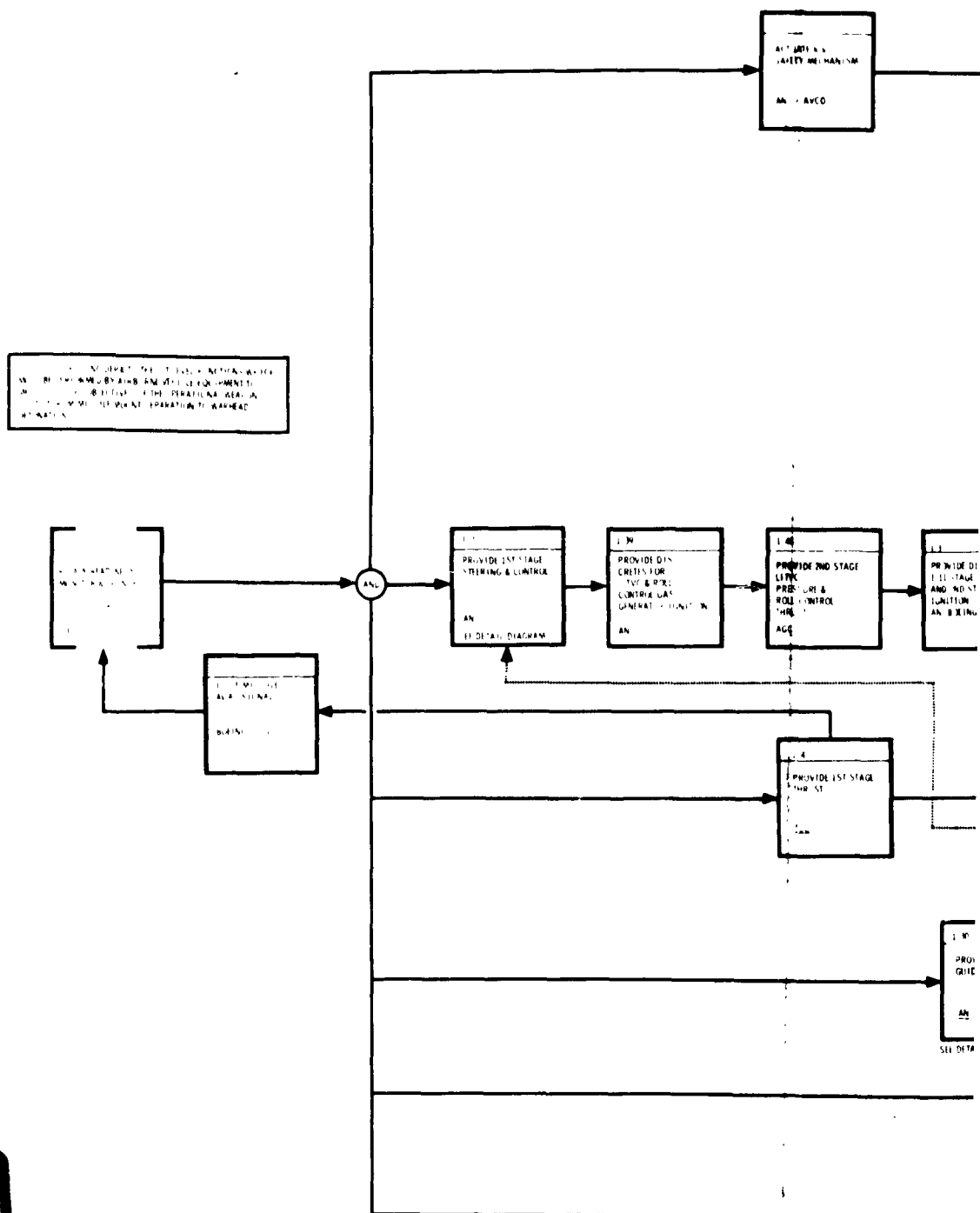
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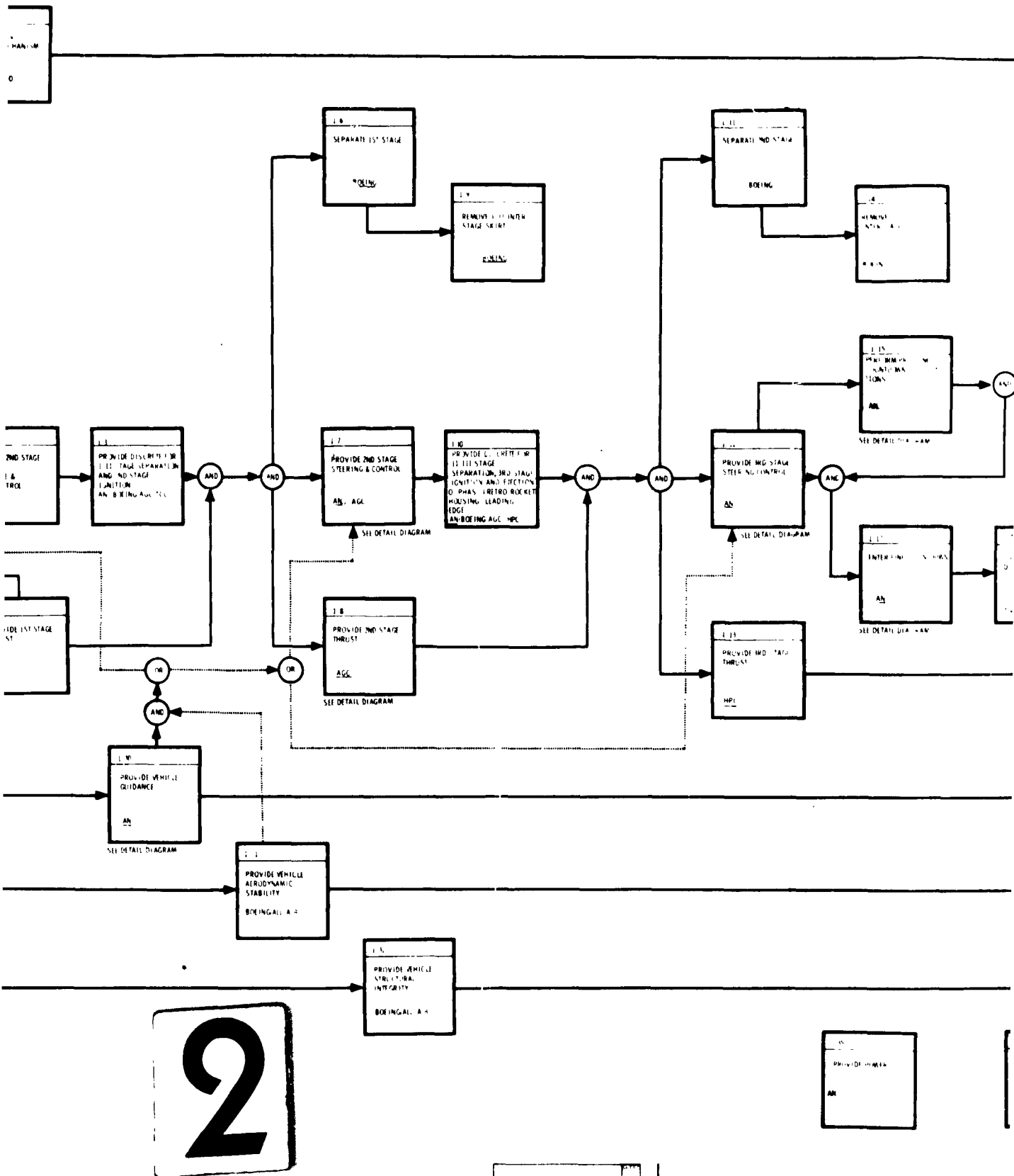
F. VOLUME INDEX (CONT.)

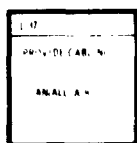
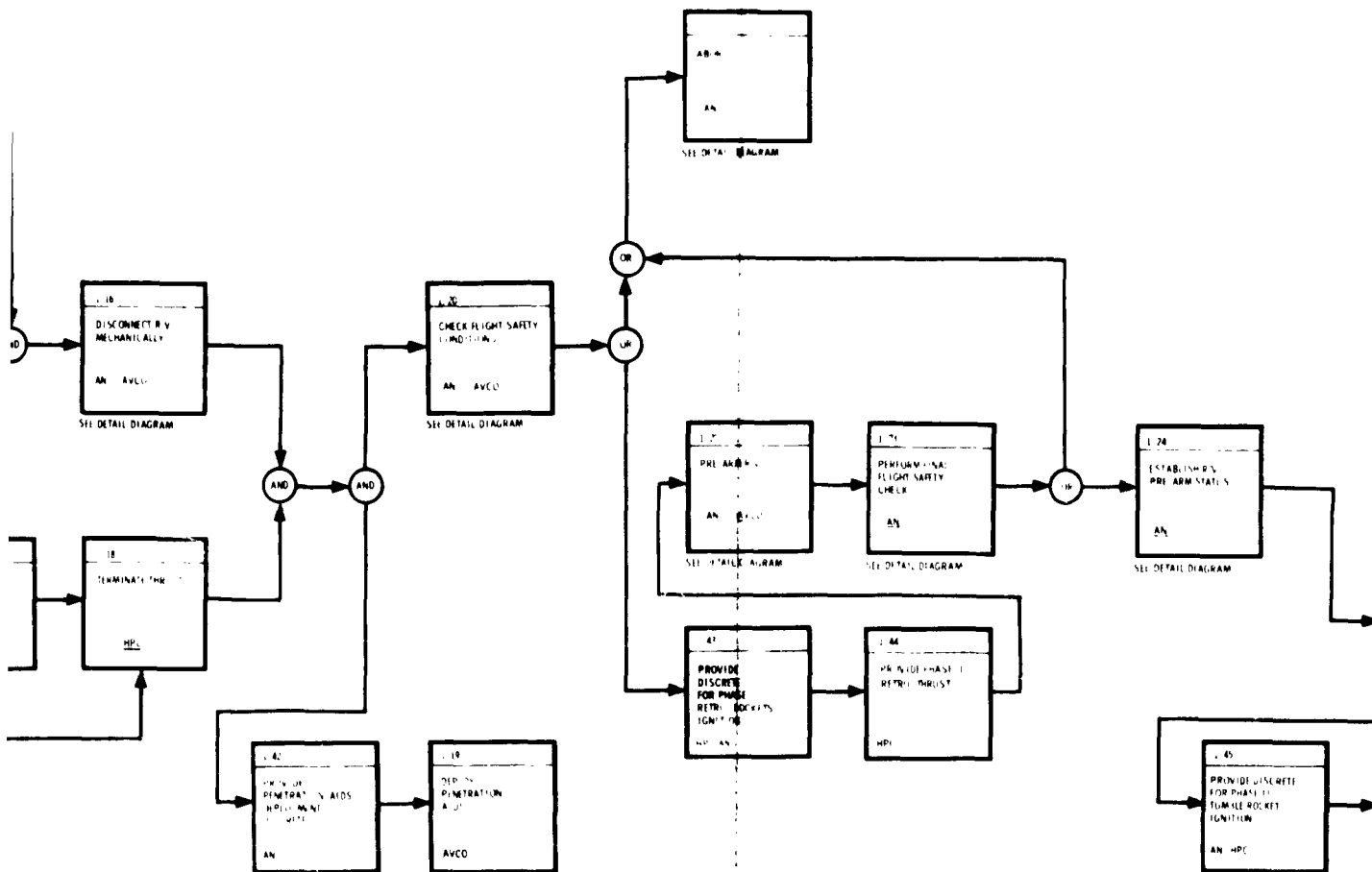
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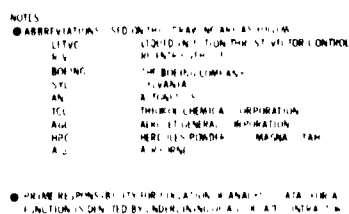








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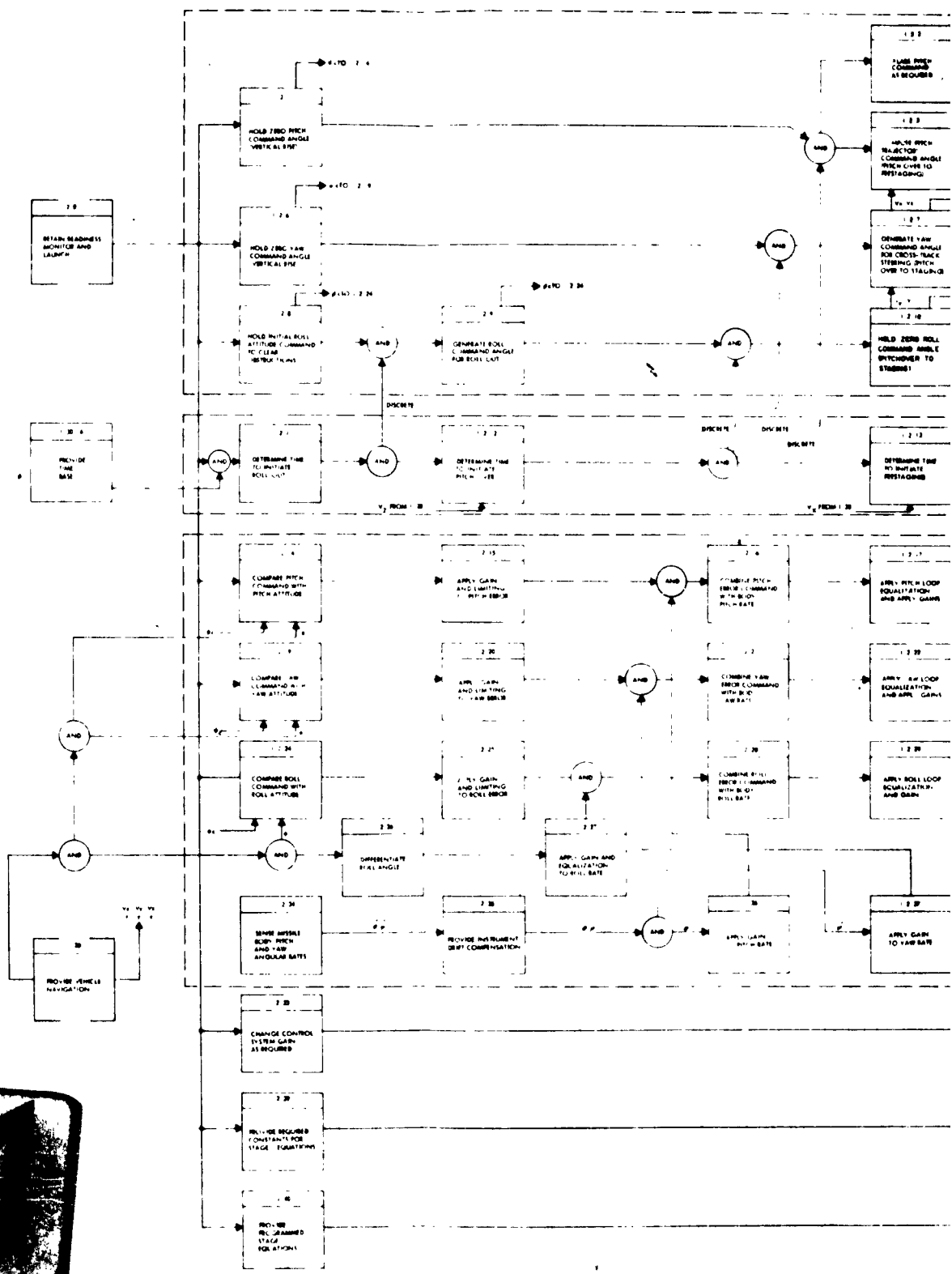


THIS FLOW DRAWING HAS DEFINED THE LOGIC AND  
FUNCTIONS REQUIRED TO PERFORM THE FLIGHT TEST LOG

▶ EACH INCLUDES 57 PAGE GALT

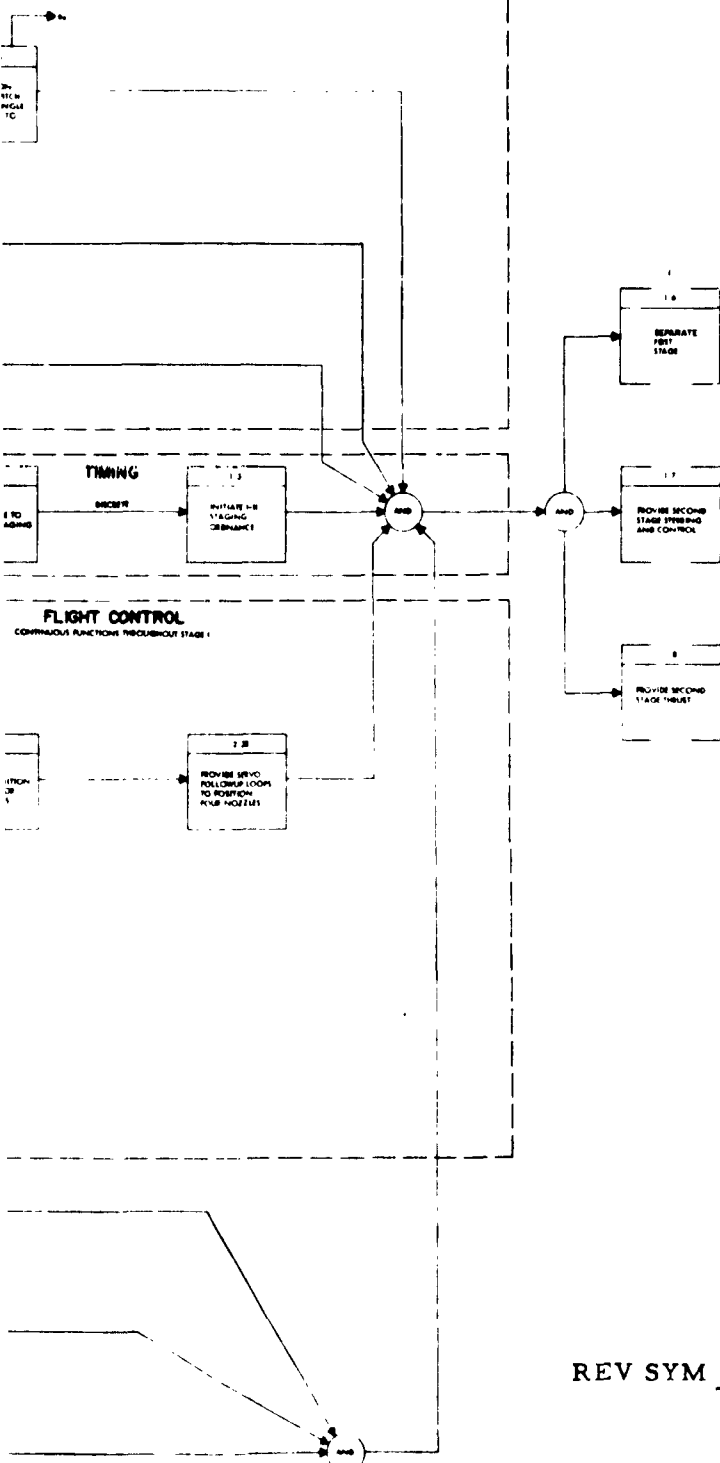
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REV SYM

# 3



REV SYM C

**BOEING**

NO D2-30044-1B

SEC

IV

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2

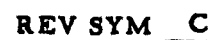
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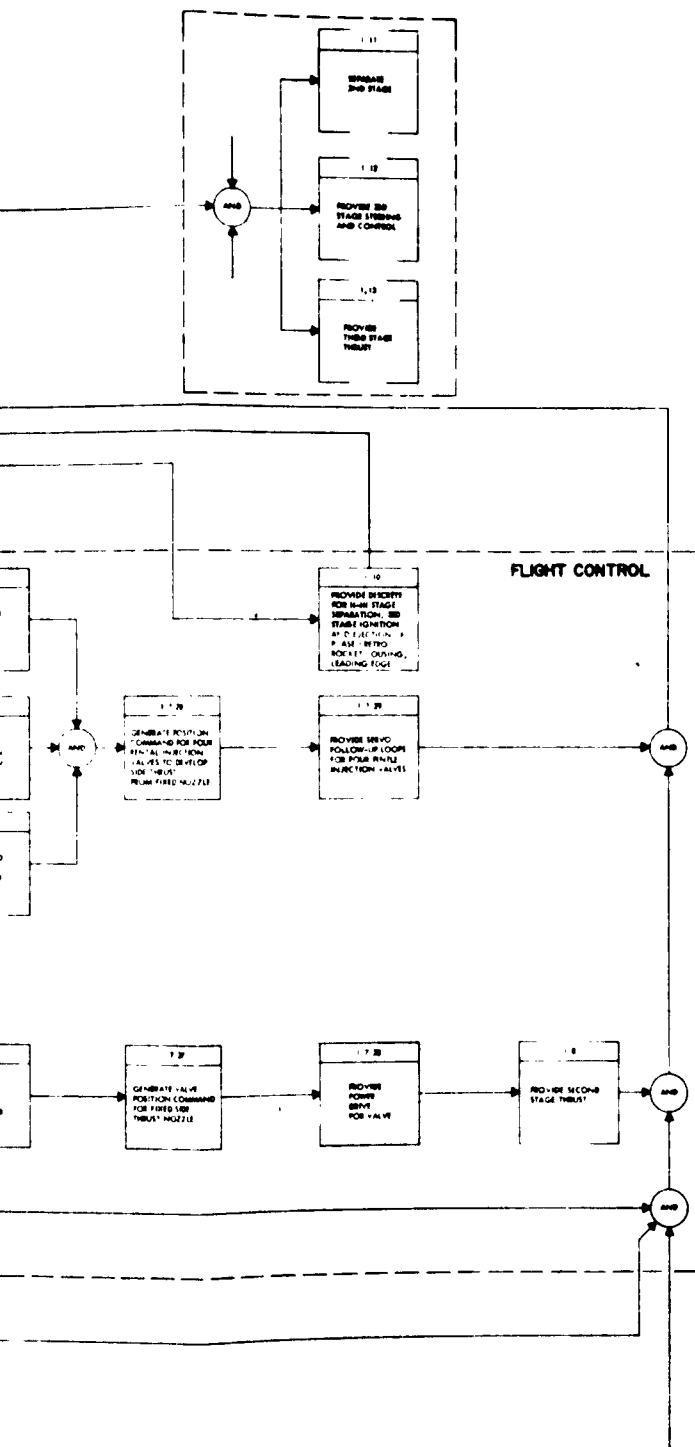
BRWUTEMAN WING XI	
FLYING NAME	
B-57B 1.2 REVISE FIRST STAGE SPEEDING & C CONTROL	
SHEET	OF
FLOW	NO.







# 3



EXPANSION OF BLOCK 1.7 AND BLOCK 1.18  
PROVIDE SECOND STAGE FIRING  
AND CONTROL

<b>BOEING</b>		DRAWING PREPARED BY	MINUTEMAN WING XI
REVISION	DATE		SHEET 17 PROVIDE SECOND STAGE FIRING AND CONTROL
		SHEET 17 OF 17	

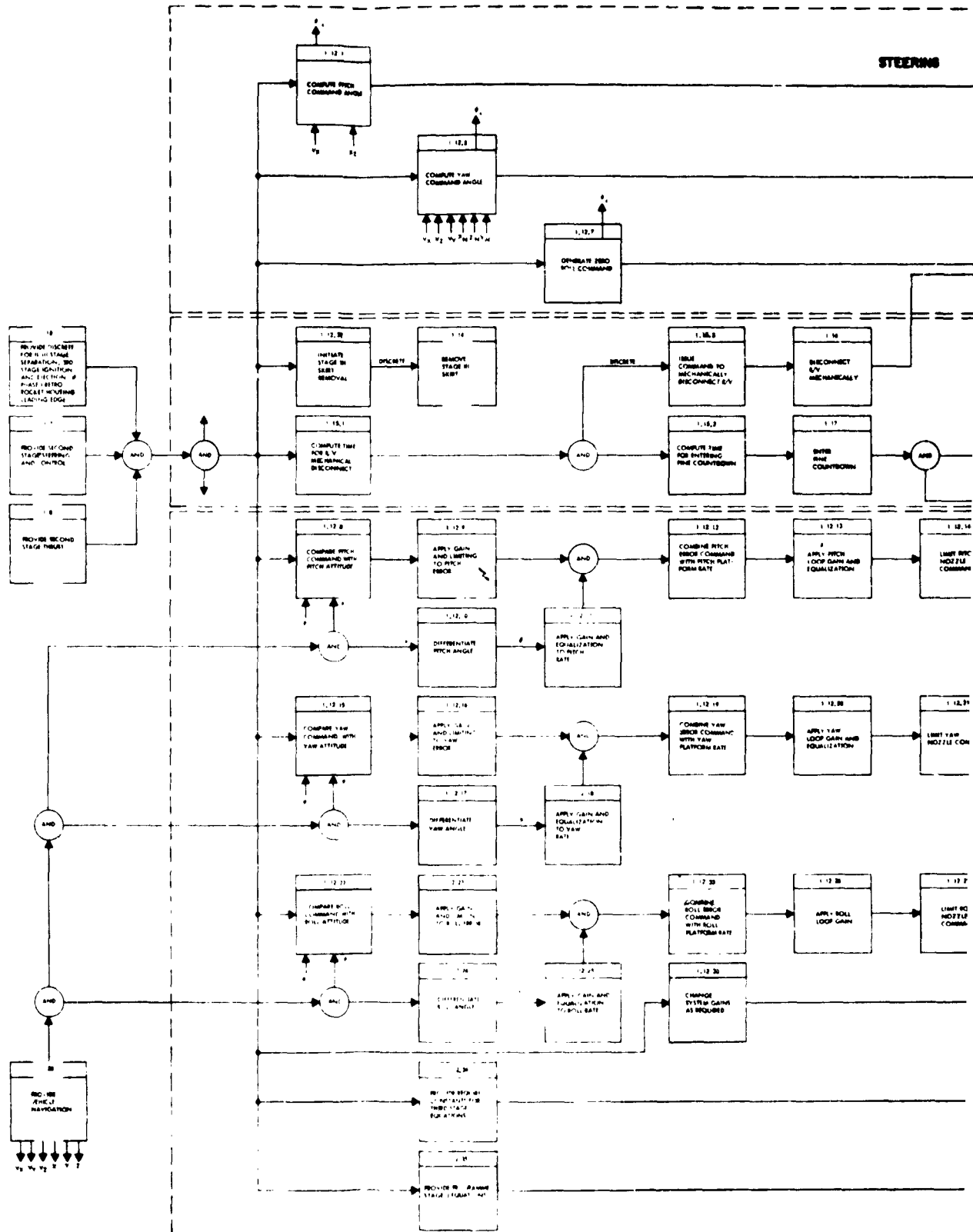
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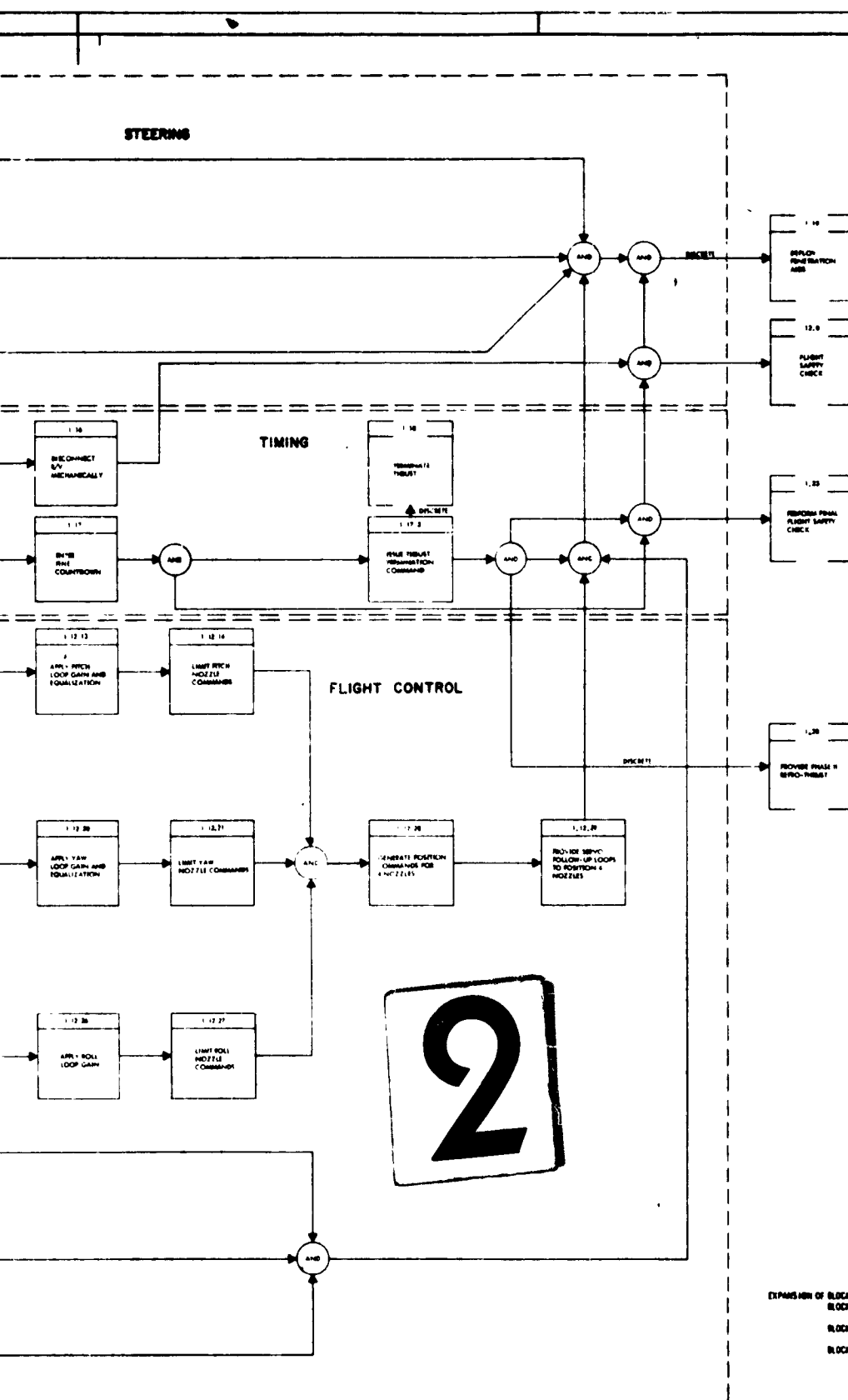
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SEC IV PAGE 3

## STEERING

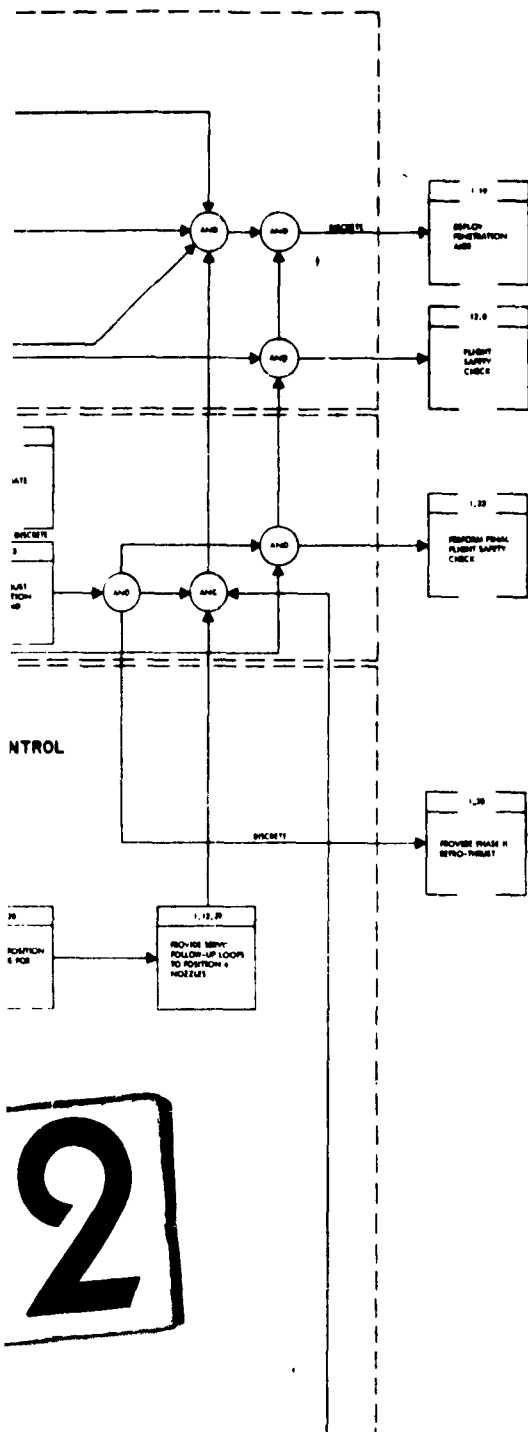




EXPANSION OF BLOCK L 12 STAGE 3 STEERING & CONTROL  
 BLOCK L 15 INITIAL PRE-FINE COUNTDOWN  
 CALCULATIONS  
 BLOCK L 16 DISCONNECT RAY  
 MECHANICALLY  
 BLOCK L 17 SWIRL COUNTDOWN

REV SYM C

3



2

EXPANSION OF BLOCK 1.12 STAGE 1 STEERING & CONTROL  
 BLOCK 1.15 INITIATE PRE-FIRE COUNTDOWN  
 CALCULATIONS  
 BLOCK 1.16 DISCONNECT RV  
 MECHANICALLY  
 BLOCK 1.17 ENTER FIRE COUNTDOWN

REV SYM C

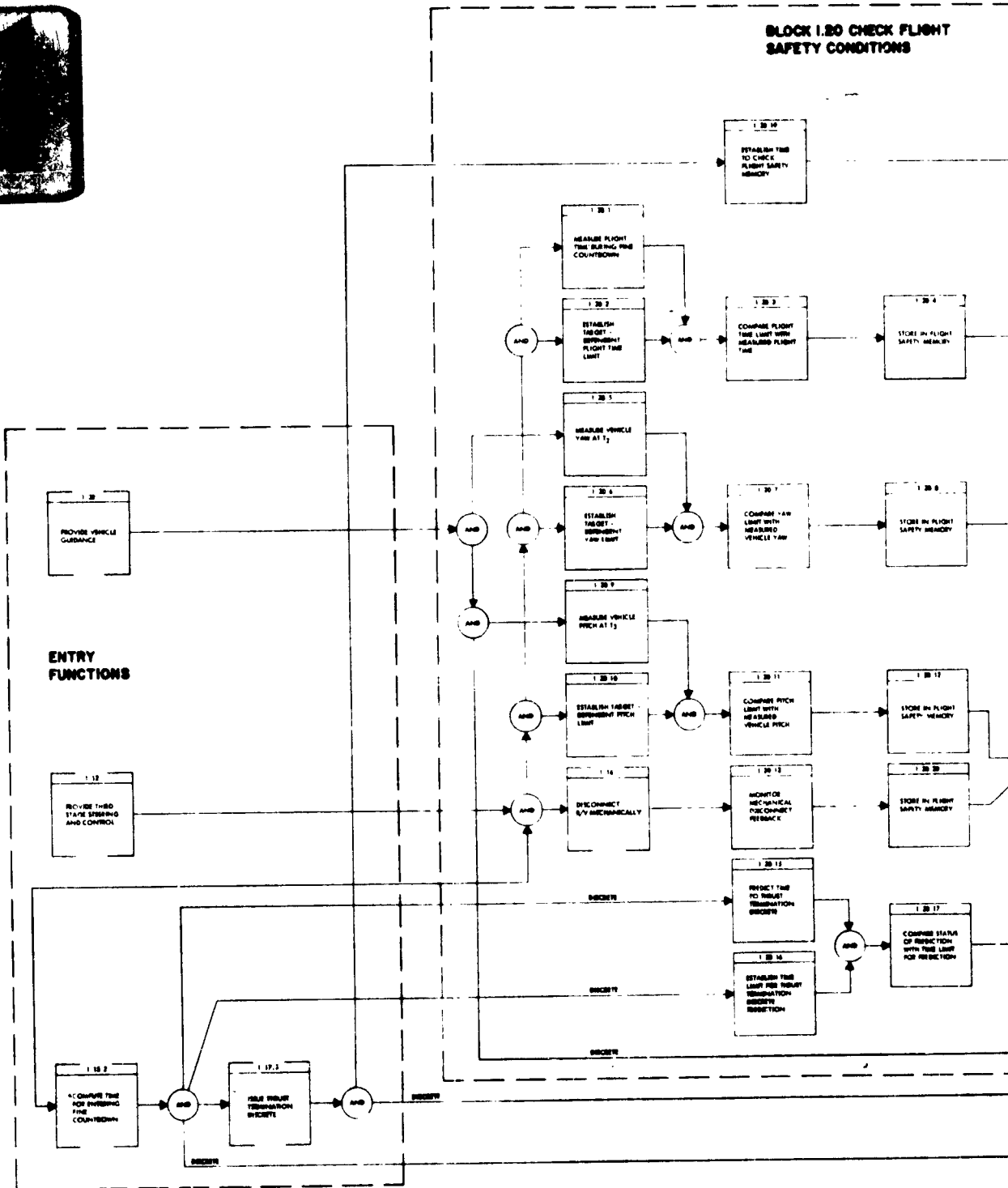
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SEC. IV PAGE 4

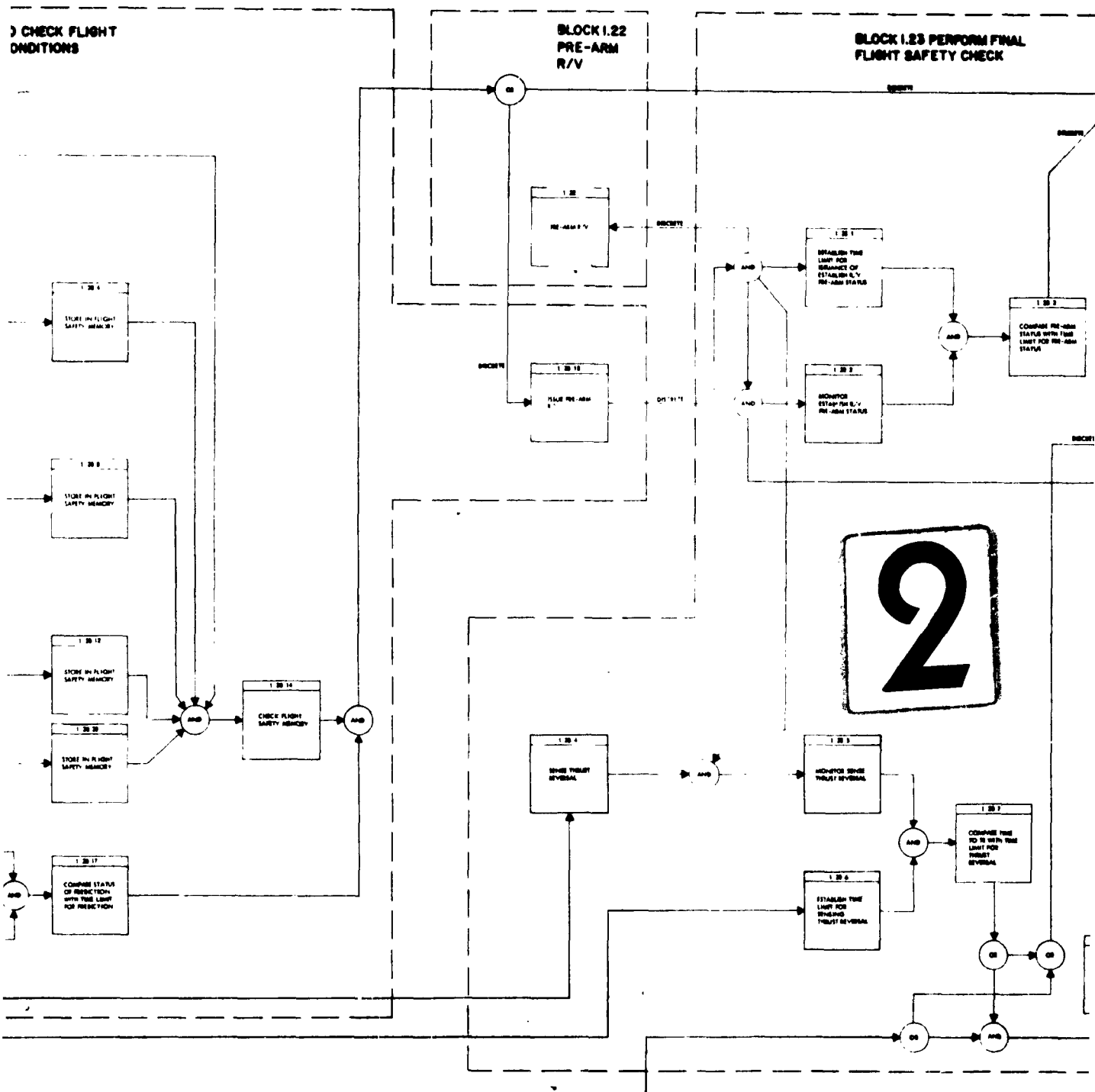
<b>DSBING</b>		DRAWING PREPARED BY	MINUTEMAN WING XI
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			BLOCK 1.15
			BLOCK 1.16
			BLOCK 1.17
		SHEET OF	FLOW NO.

# **BLOCK I.20 CHECK FLIGHT SAFETY CONDITIONS**

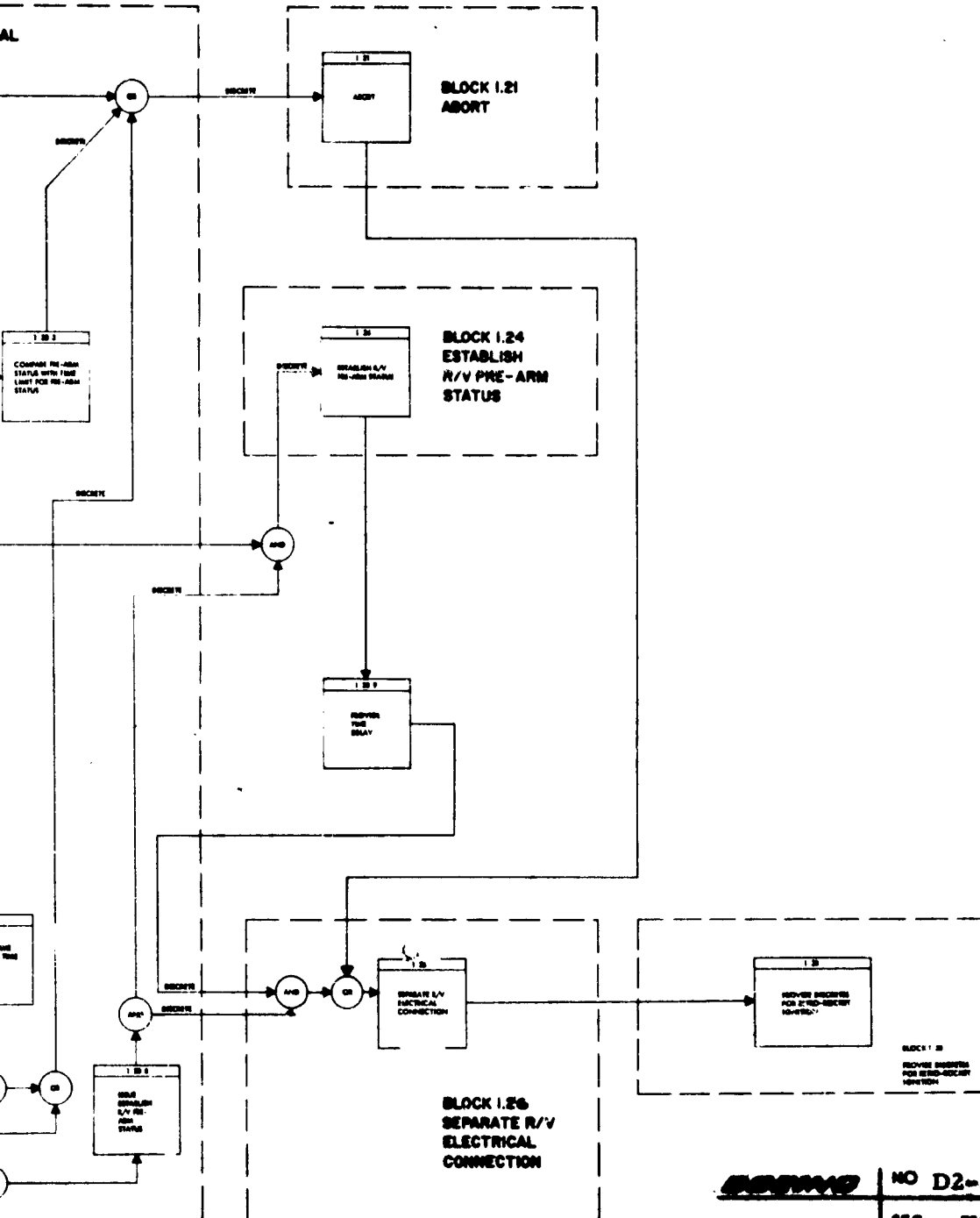
## **ENTRY FUNCTIONS**



## FLIGHT SAFETY AND PRE-ARM R/V SEQUENCE







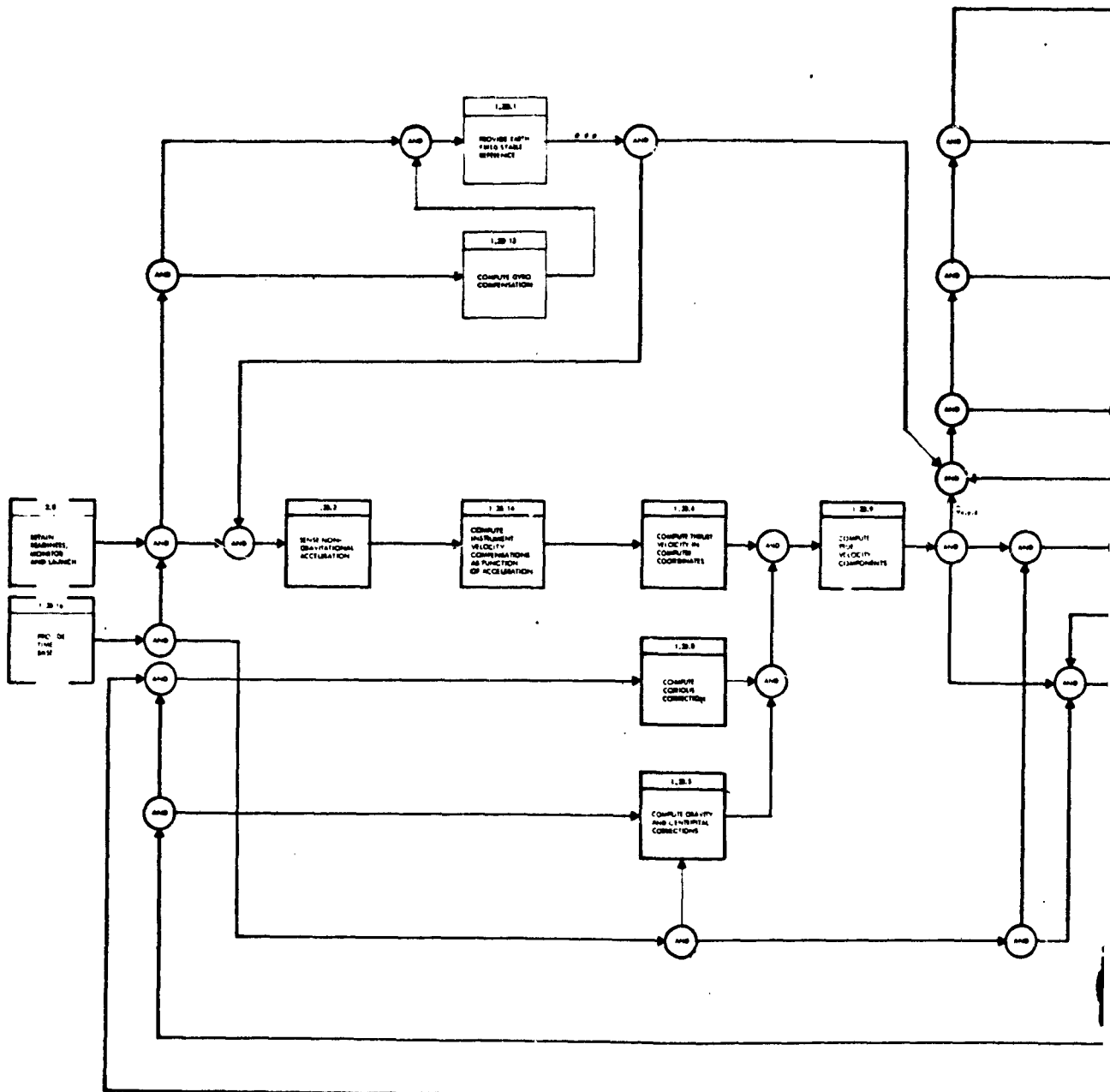
1. BRANCH OF BLOCK 1-20 CHECK FLASH BATTERY CONNECTION  
 BLOCK 1-21 ABORT  
 BLOCK 1-22 RECEIVE PULSE FLASH BATTERY CHECK  
 BLOCK 1-23 INVERTED R/V PRE-ARM STATUS  
 BLOCK 1-24 RECEIVE MESSAGE FOR RETRO-ROCKET MONITORING

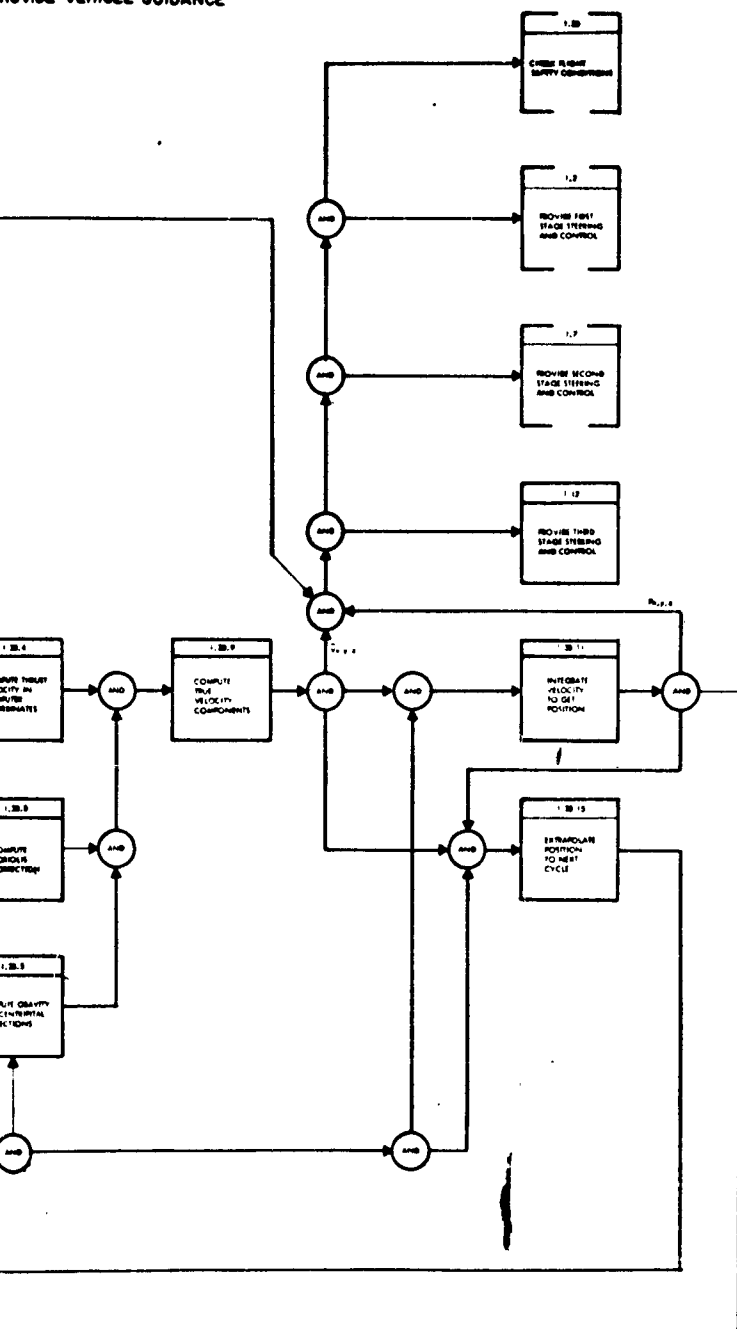
~~SECRET~~ NO D2-30044-1B  
 SEC. IV PAGE 5

REV SYM C

<b>REVISION</b>		DRAWING PREPARED BY:		<b>MINUTEMAN WING 32</b>	
DATE	BY			PAPER NAME: BLOCK 1-20 BLOCK 1-21 BLOCK 1-22	
				SHEET 5 OF 5	
				PLANT NO.	
				DATE	

**BLOCK 1.30 PROVIDE VEHICLE GUIDANCE**



**PROVIDE VEHICLE GUIDANCE**

2

**BOEING**

NO D2-30044-1B

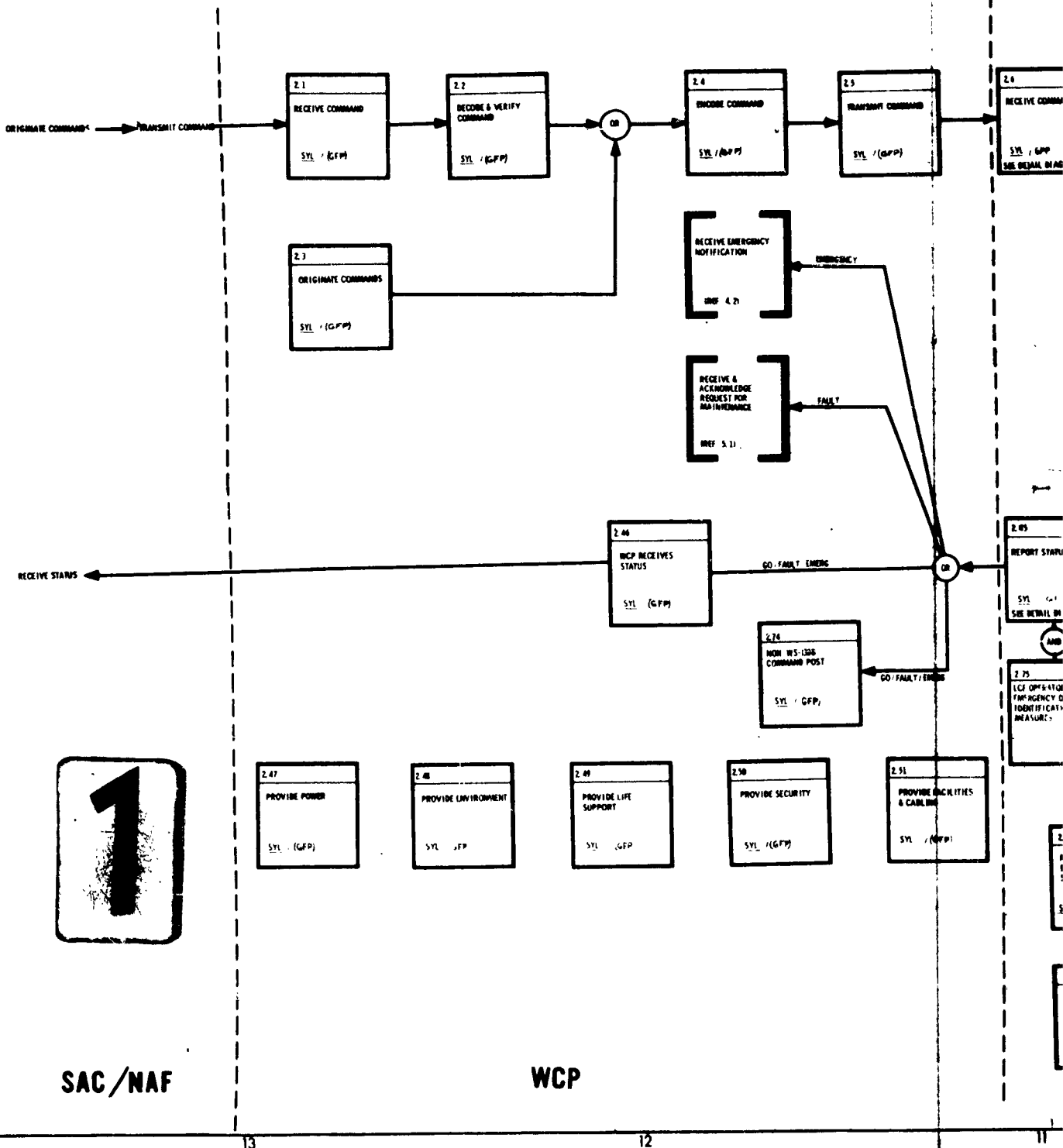
SEC. IV

PAGE 6

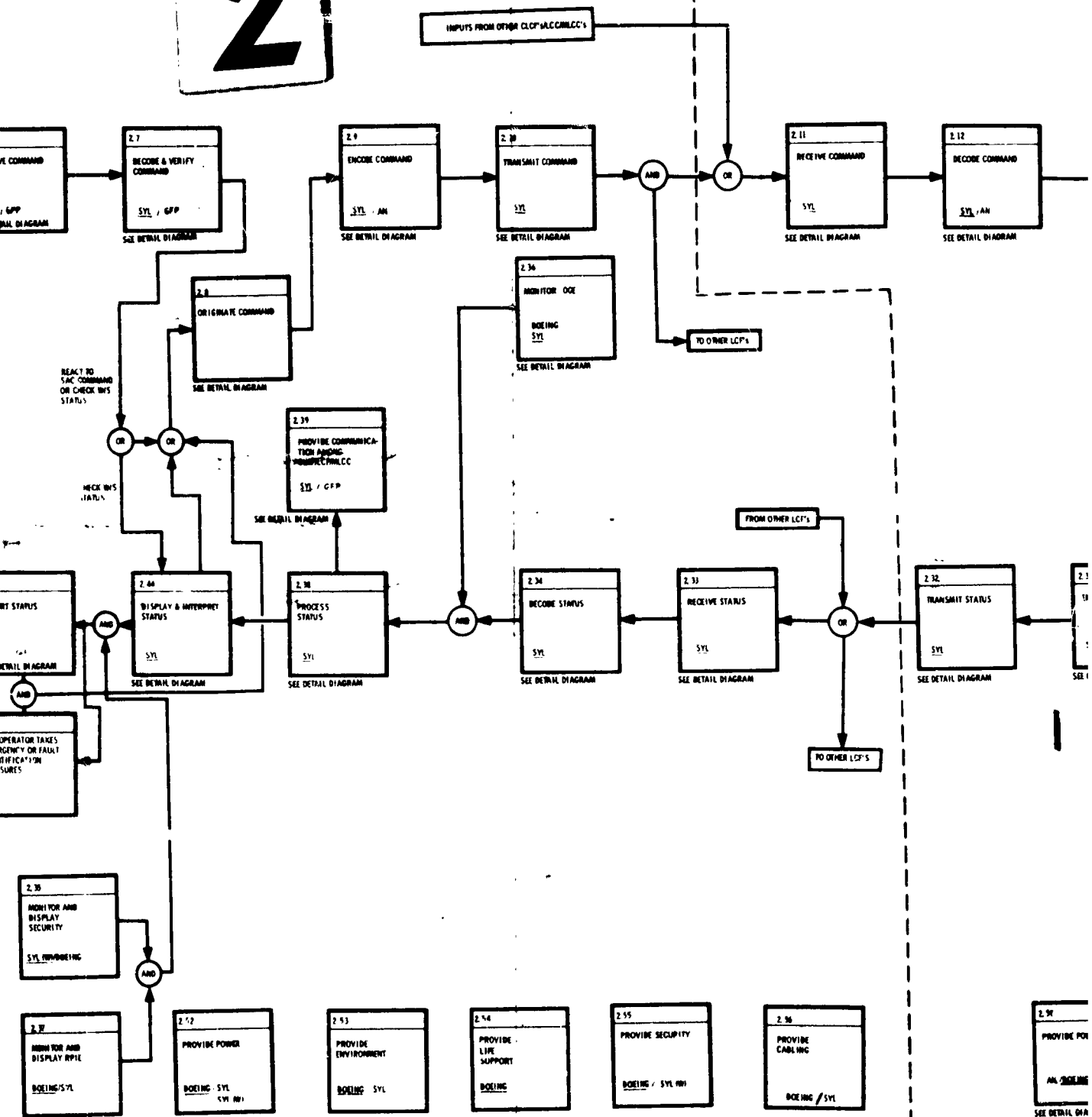
REV SYM C

<b>BOEING</b>		DRAWING PREPARED BY	<b>MINUTEMAN WING 1</b>
<b>VIEW</b>	<b>PLAN</b>		<b>FLIGHT RANGE</b>
			PROVIDED WITH THE COUNDMAN PLUNDER : 11
			<b>SHEET</b> <b>OF</b> <b>PLOUGHING</b>

THE SYSTEM IS IN STRATEGIC ALERT  
THIS FLIGHT READYNESS IMPLIES THE  
1ST LEVEL FUNCTIONS WHICH MUST BE ACCOMPLISHED  
TO CONTINUOUSLY MONITOR THE OPERATIONAL STATUS AND  
SECURITY OF THE WEAPON SYSTEM, TO MONITOR FAULTS  
AND TO LAUNCH THE MISSILE WHILE THE WEAPON SYSTEM  
IS MAINTAINED IN A TACTICAL STATUS.

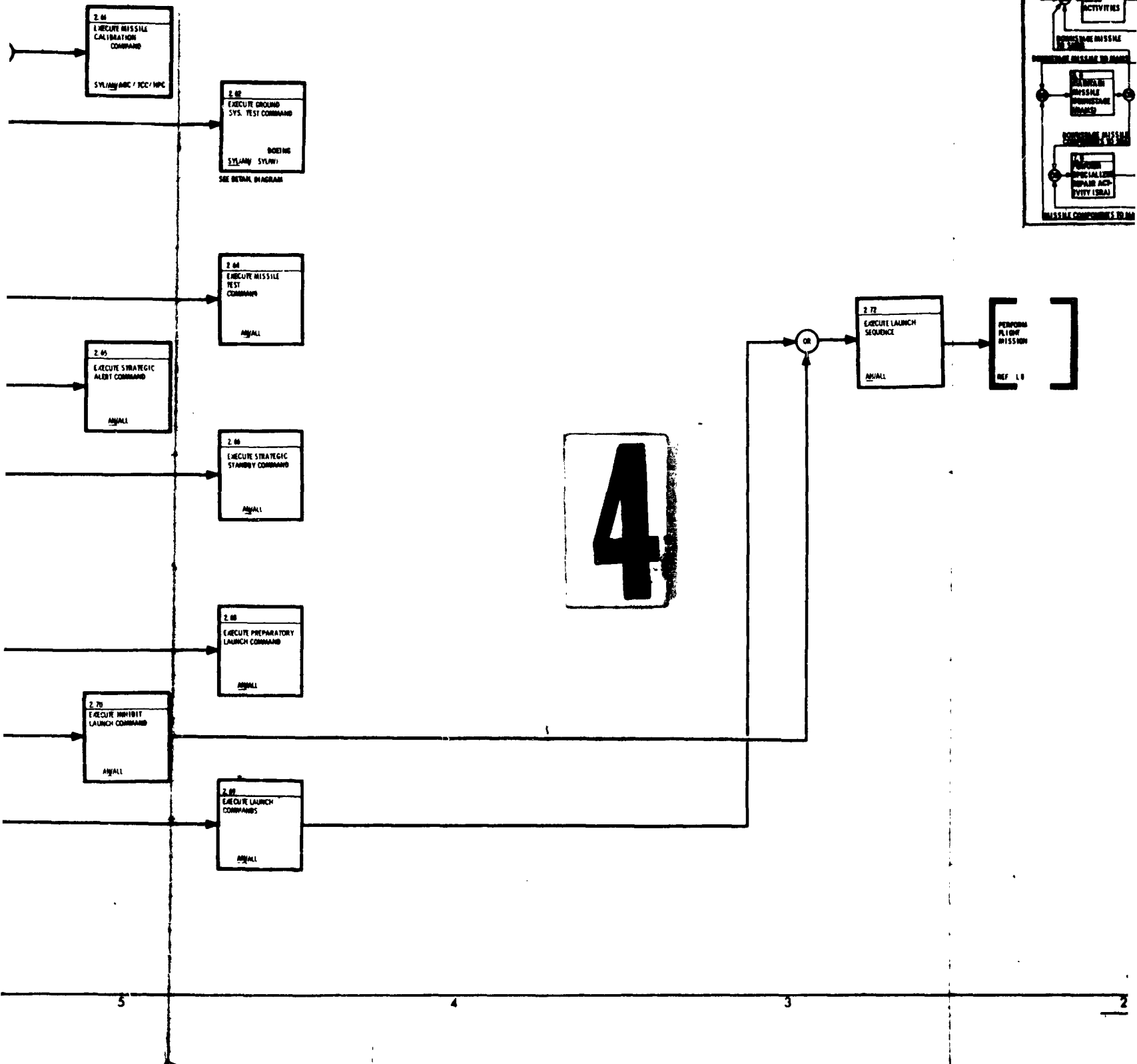


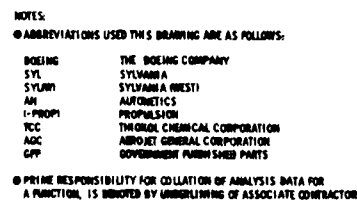
# 2



CLCF/SLCF/MLCC







THE WEAPON SYSTEM HAS BEEN MAINTAINED IN A STRATEGIC ALERT STATUS UNTIL EITHER THE RECEIPT OF AN APPROPRIATE SEQUENCE OF COMMANDS WHICH INITIATES A LAUNCH SEQUENCE OR AN ABNORMAL CONDITION OCCURS. IF THE LAUNCH SEQUENCE IS COMPLETED IT CONCLUDES IN "PERFORM FLIGHT NOSSION." IF AN ABNORMAL CONDITION OCCURS, IT IS ALLEVATED BY RESPONSE TO EITHER THE MALFUNCTION OR EMERGENCY CONDITION.

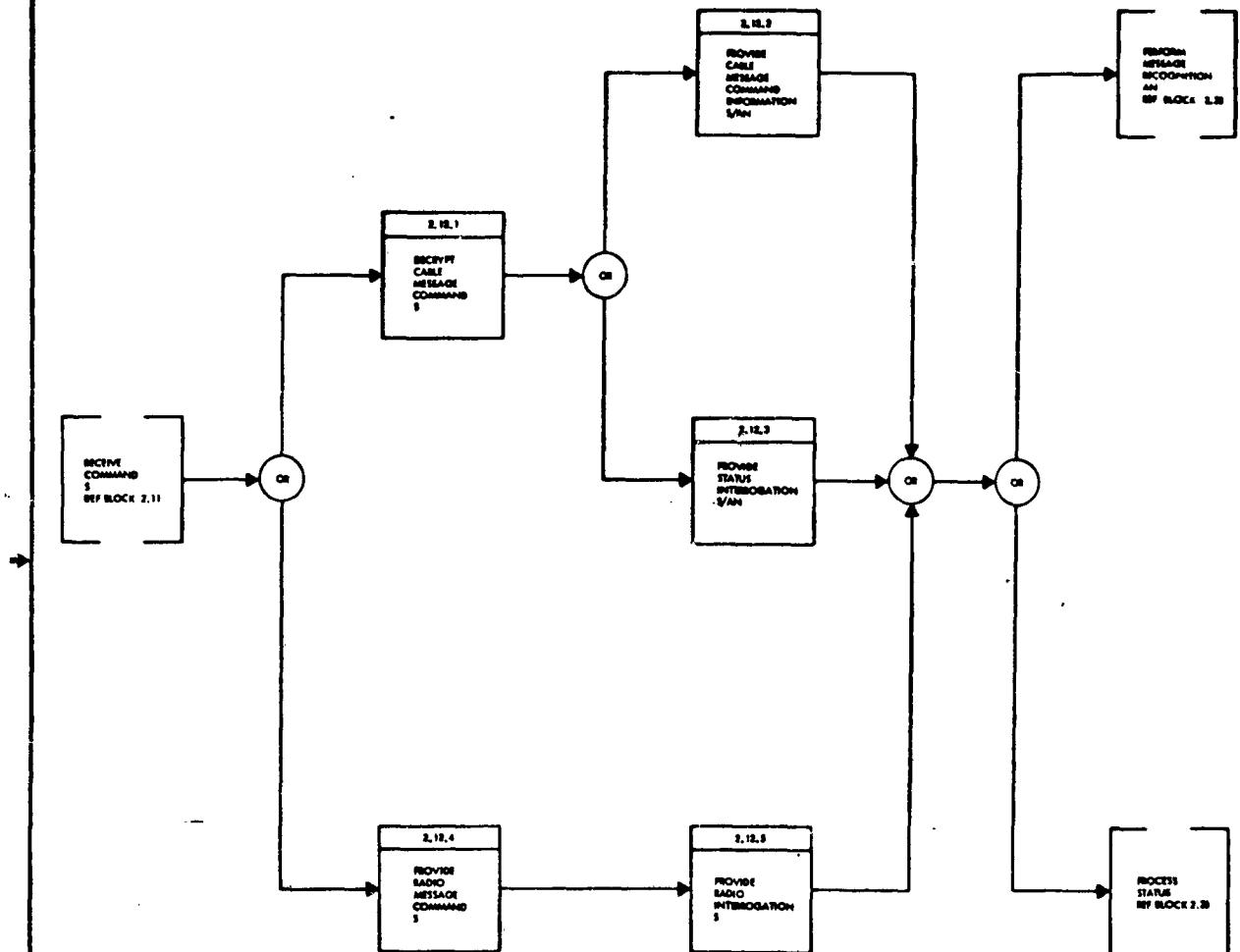
<b>BOEING</b>	NO D2-30044-1B
SEC. IV	PAGE 7

REV SYM C

<b>RECEIVED</b>	RECEIVED FROM:	<b>SHUTTLEMAN WING XX</b>
	<b>RECEIVED</b>	<b>PORT GAGE</b>
	<b>RECEIVED</b>	<b>RETURN READINESS</b>
	<b>RECEIVED</b>	<b>REPAIR AND LAUNCH</b>
		<b>TO OF</b>
		<b>DATE</b>



DETAIL SECOND LEVEL FLOW  
(BLOCK 2.12 DECODE COMMAND)



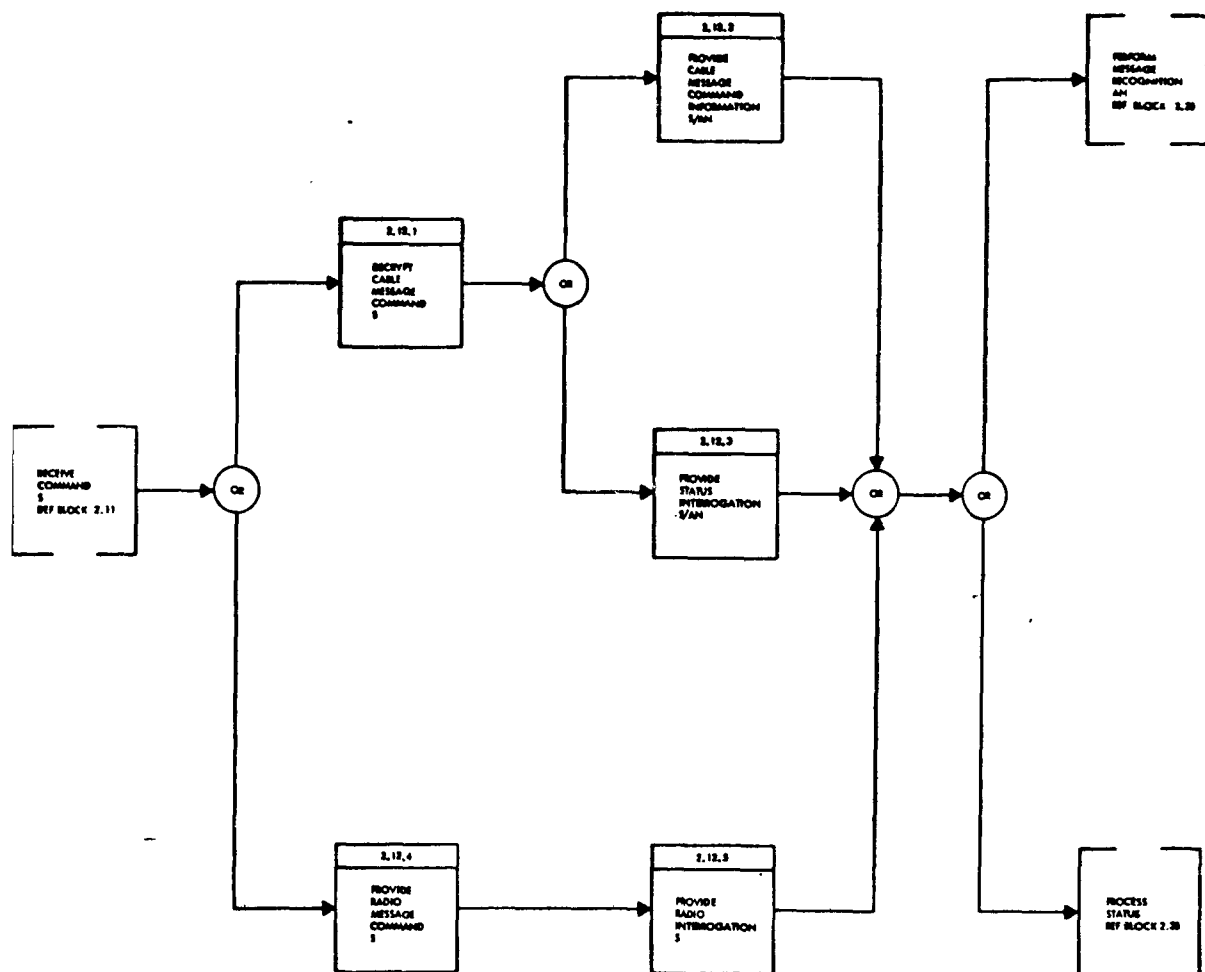
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REV SYM C

BOEING NO  
SEC

REVISION	DATE	DRAWING PM

DETAIL SECOND LEVEL FLOW  
(BLOCK 2.12 DECODE COMMAND)



2

REV SYM C

BOEING

NO D2-30044-1B

SEC. IV

PAGE 8

BOEING

REVISION	DATE

DRAWING PREPARED BY

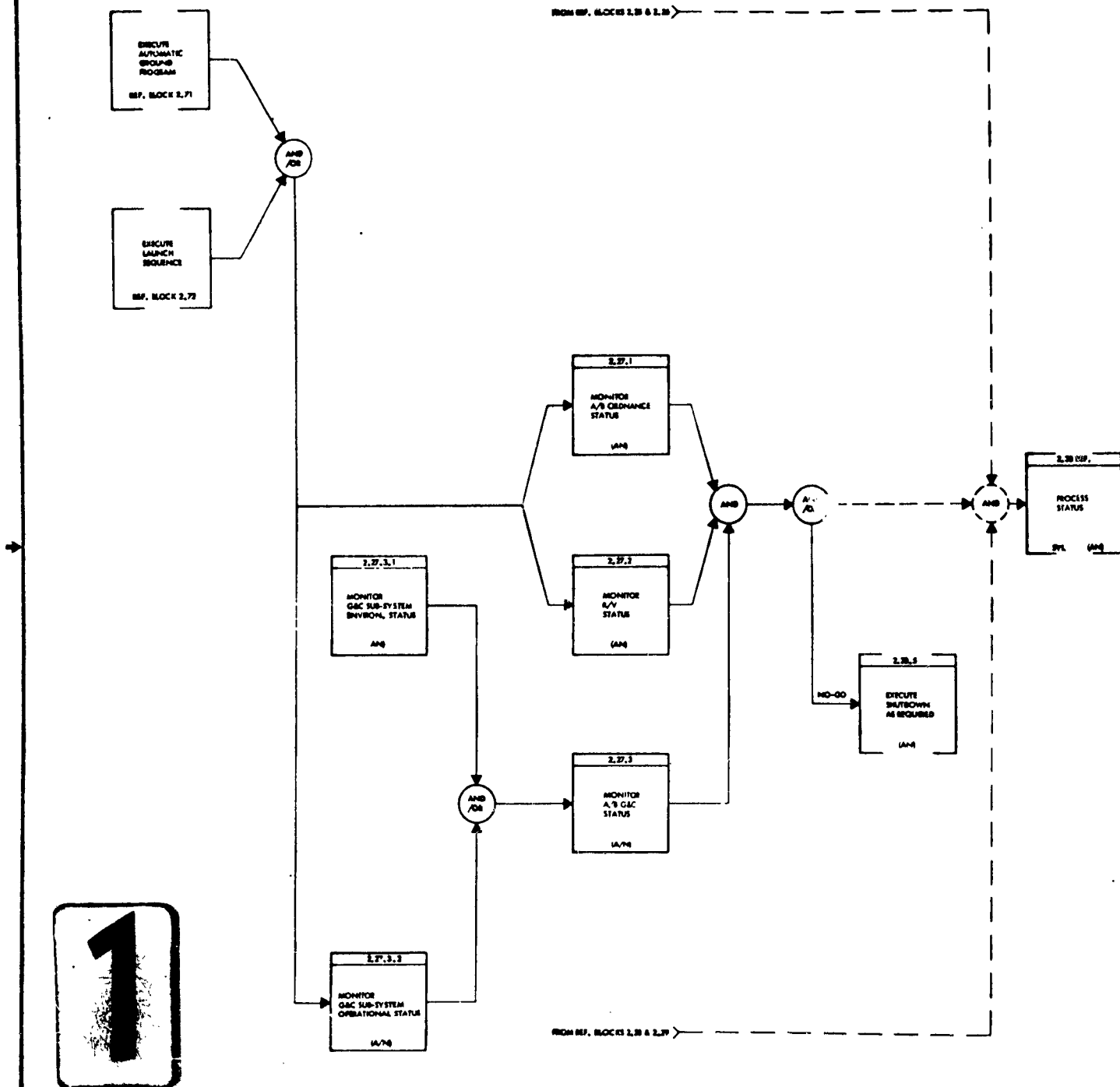


MINUTEMAN WING VI

FLOW NAME:  
BLOCK 2.12  
DECODE COMMAND

SHEET OF FLOW NO.

# DETAIL SECOND-LEVEL FLOW (BLOCK 2.27 MONITOR AVE)



REV SYM C

BOEING

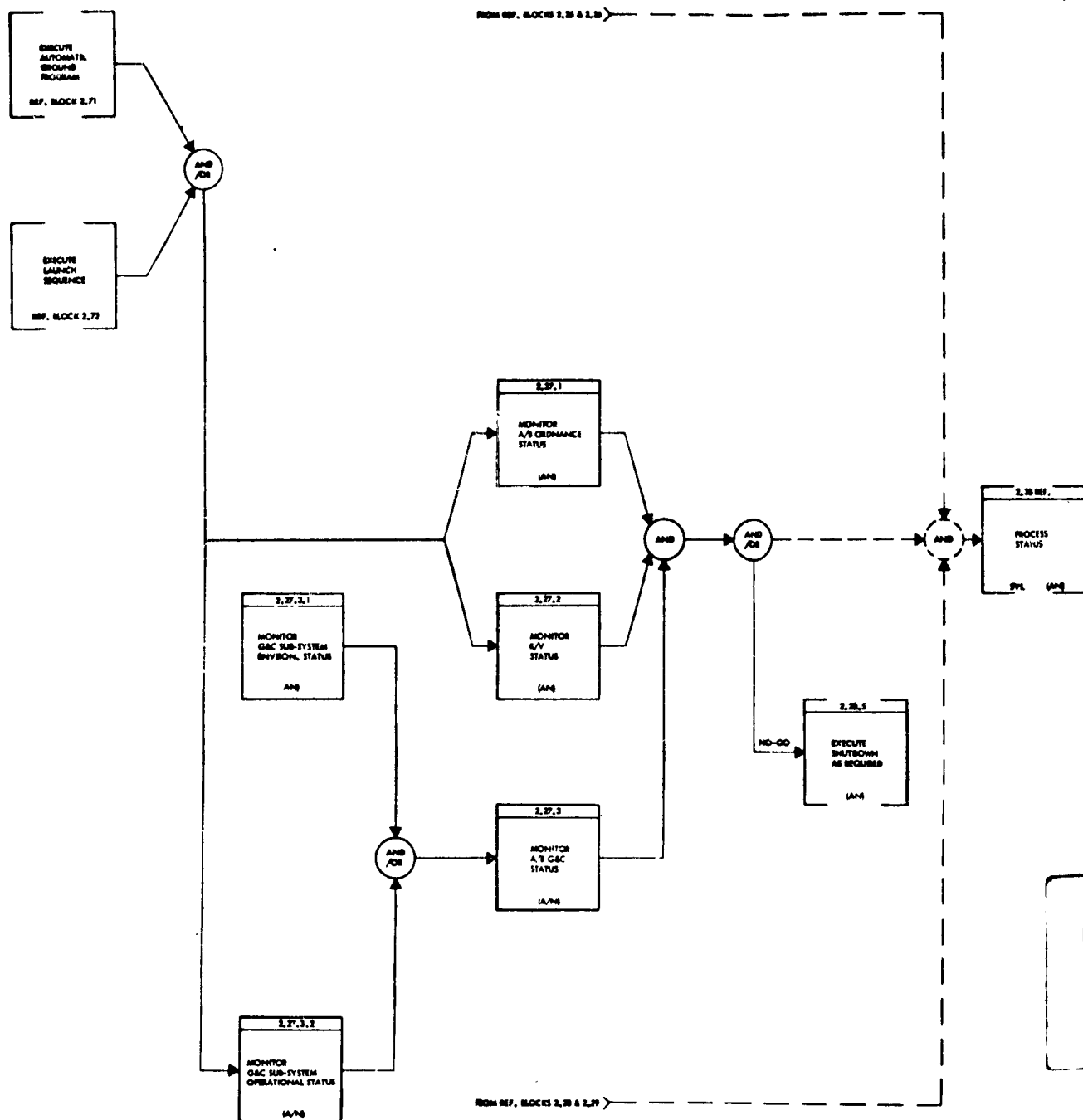
NO D2-30044-1B

SEC. IV PAGE 9

BOEING		DRAWING PREPARED BY:	
REVISION	DATE		



# DETAIL SECOND-LEVEL FLOW (BLOCK 2.27 MONITOR AVE)



2

REV SYM C

BOEING

NO D2-30044-1B

SEC. IV PAGE 9

BOEING

REVISION DATE

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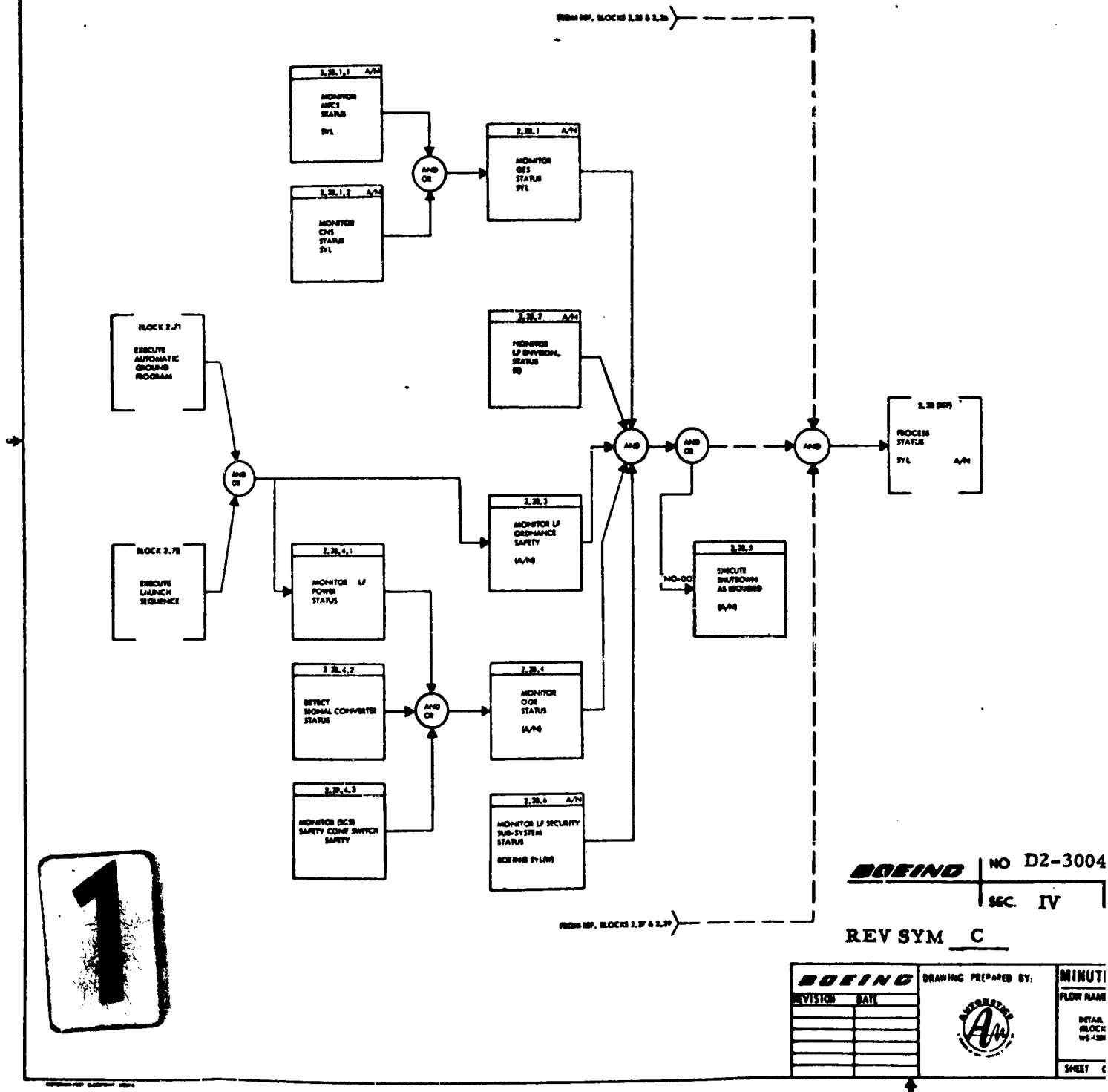


MINUTEMAN WING VI

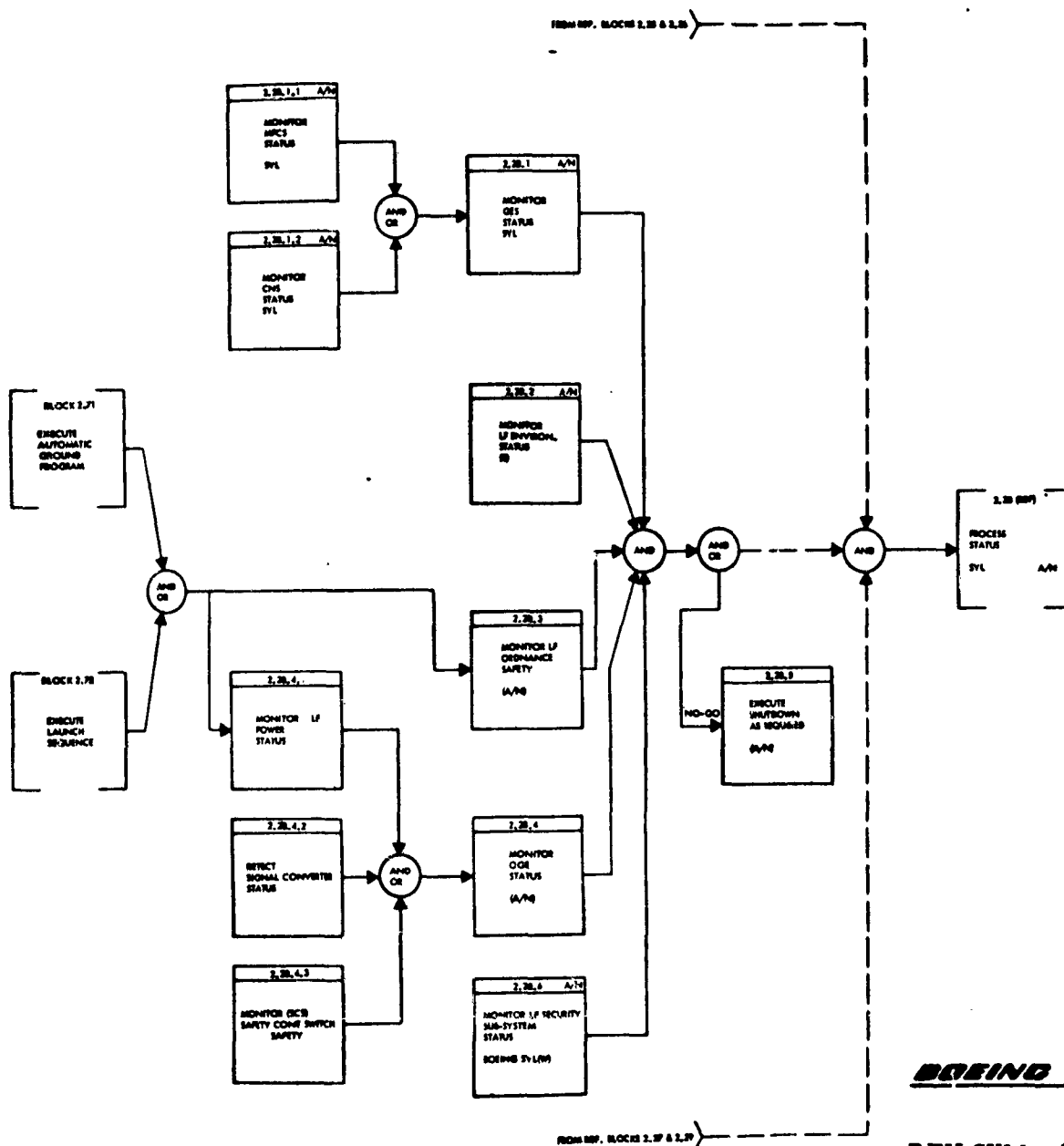
FLOW NAME:  
Block 2.27  
MONITOR AVE

SHEET OF FLOW NO.

# DETAIL SECOND-LEVEL FLOW (BLOCK 2.26-MONITOR OGE)



# DETAIL SECOND-LEVEL FLOW (BLOCK 2.28-MONITOR OGE)

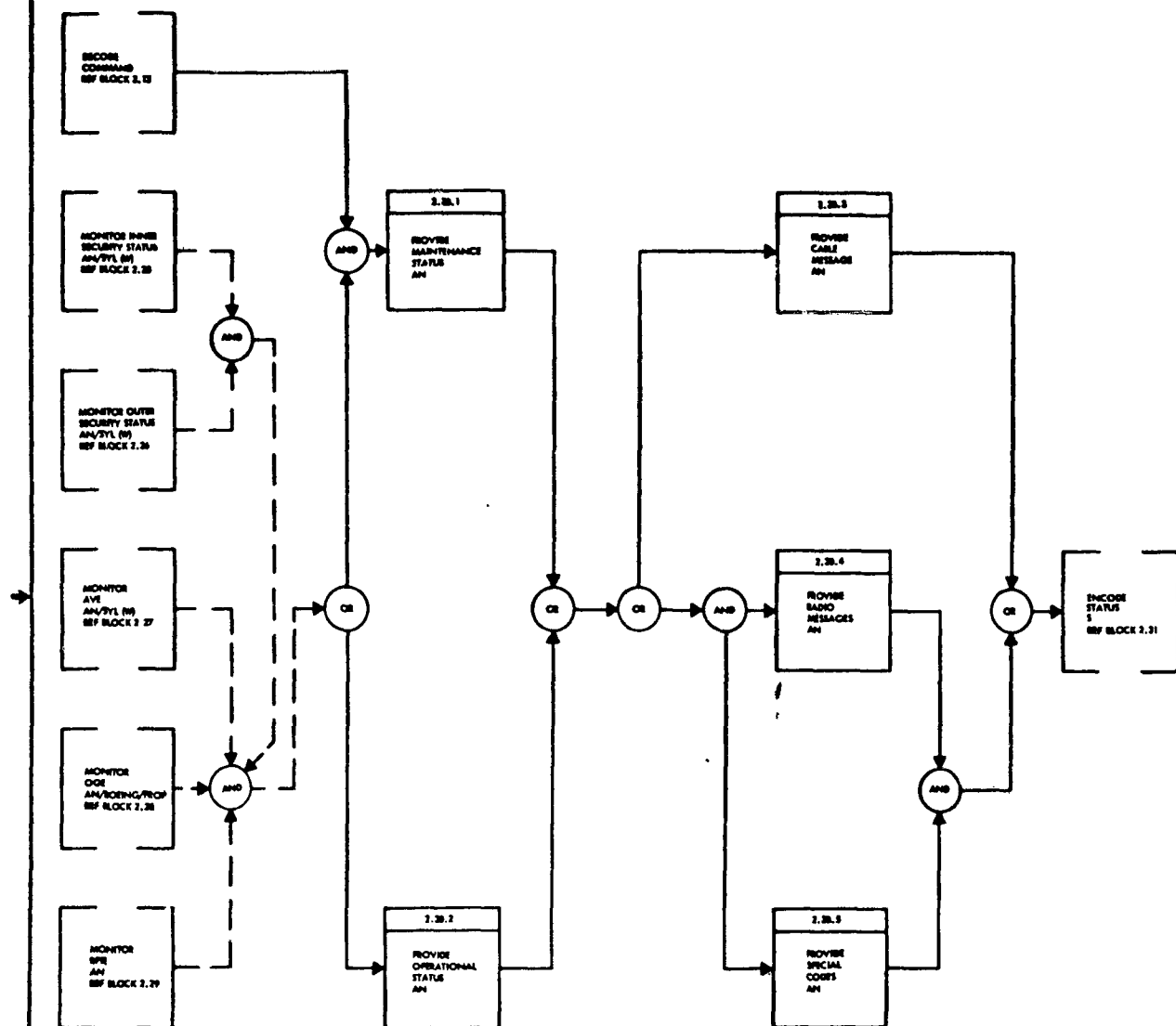


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BOEING NO D2-30044-1B  
SEC. IV PAGE 10  
REV SYM C

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REVISION	DATE		FLOW NAME:
			DETAIL SECOND-LEVEL FLOW
			BLOCK 2.28 - MONITOR OGE
			WT-1308
			SHEET OF FLOW NO.

DETAIL SECOND LEVEL FLOW  
(BLOCK 2.30 PROCESS STATUS)

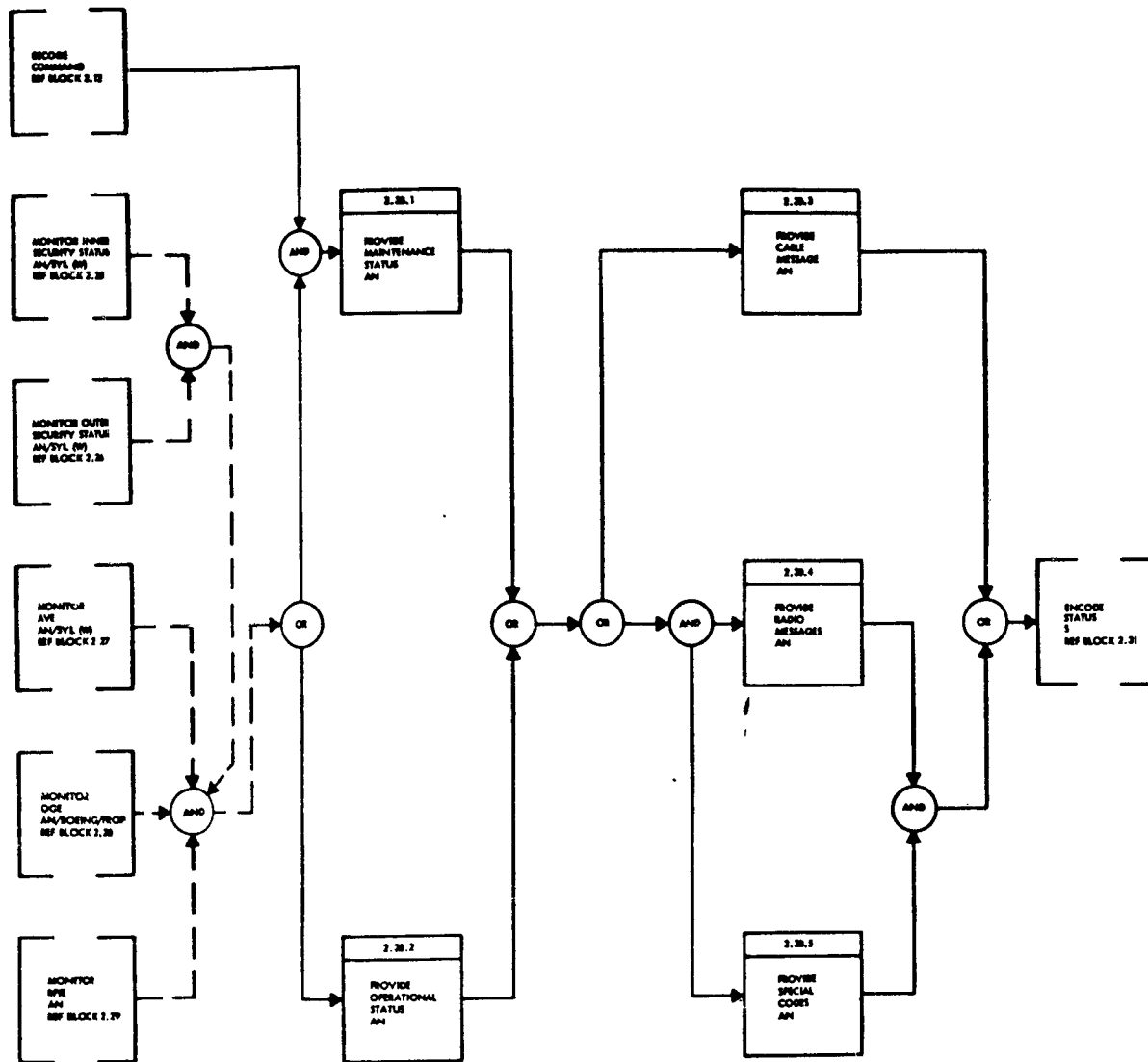


1

REV SYM C **BOEING** NO I  
SEC.

BOEING		DRAWING PREPARED BY
REVISOR	DATE	A

DETAIL SECOND LEVEL FLOW  
(BLOCK 2.30 PROCESS STATUS)



2

REV SYM C

BOEING

NO D2-30044-1B

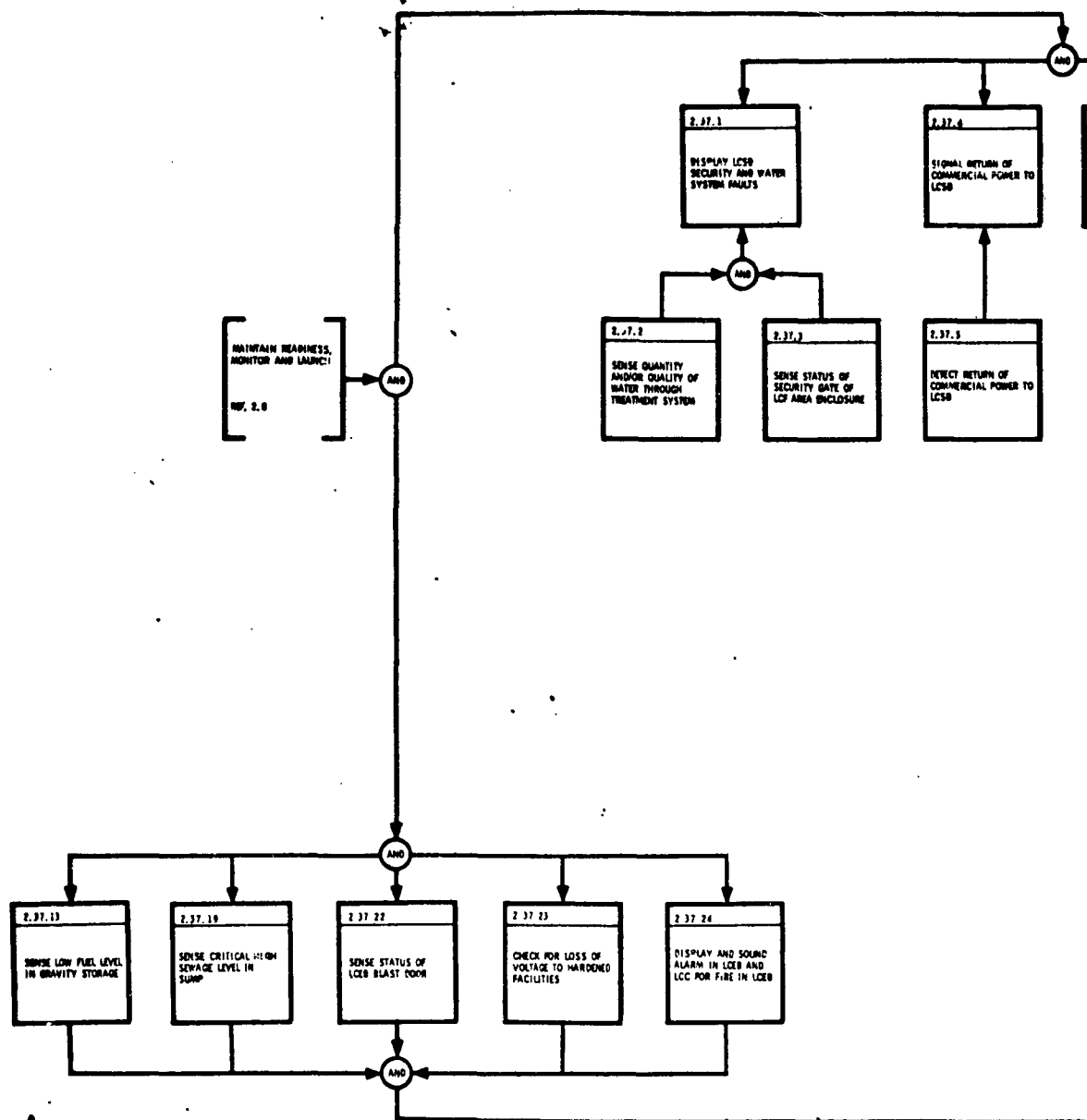
SEC. IV

PAGE 11

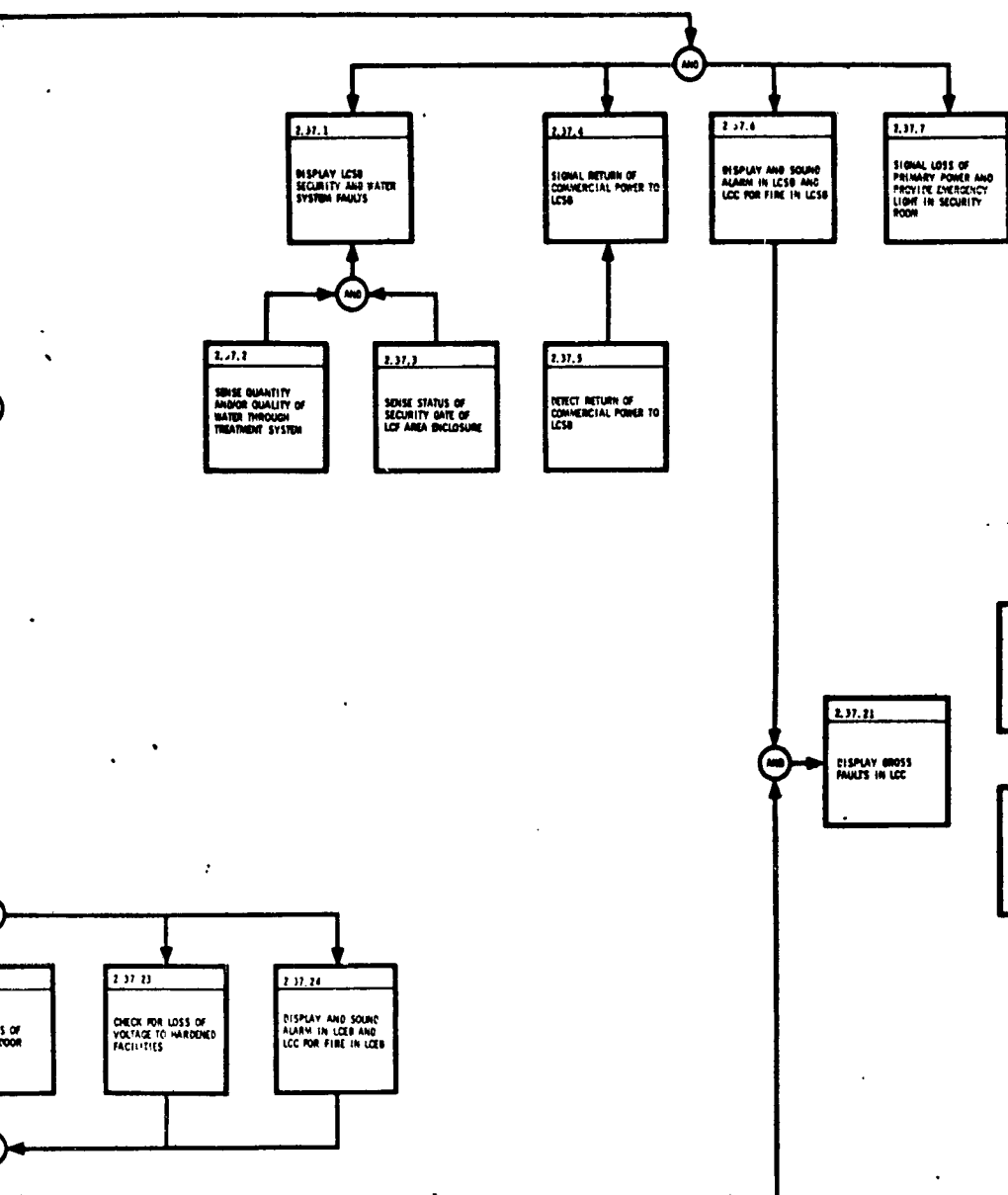
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REVISION	DATE		FLOW NAME:
			BLOCK 2.30
			PROCESS STATUS
			SHEET OF
			FLOW NO.



1



MAINTAIN READINESS,  
MONITOR AND LAUNCH!  
REF. 2.8



PROVIDE POWER FOR  
MONITORING SYSTEM  
REF. 2.52.79

PROVIDE POWER FOR  
MONITORING SYSTEM  
IN LCC  
REF. 2.52.116

# 2

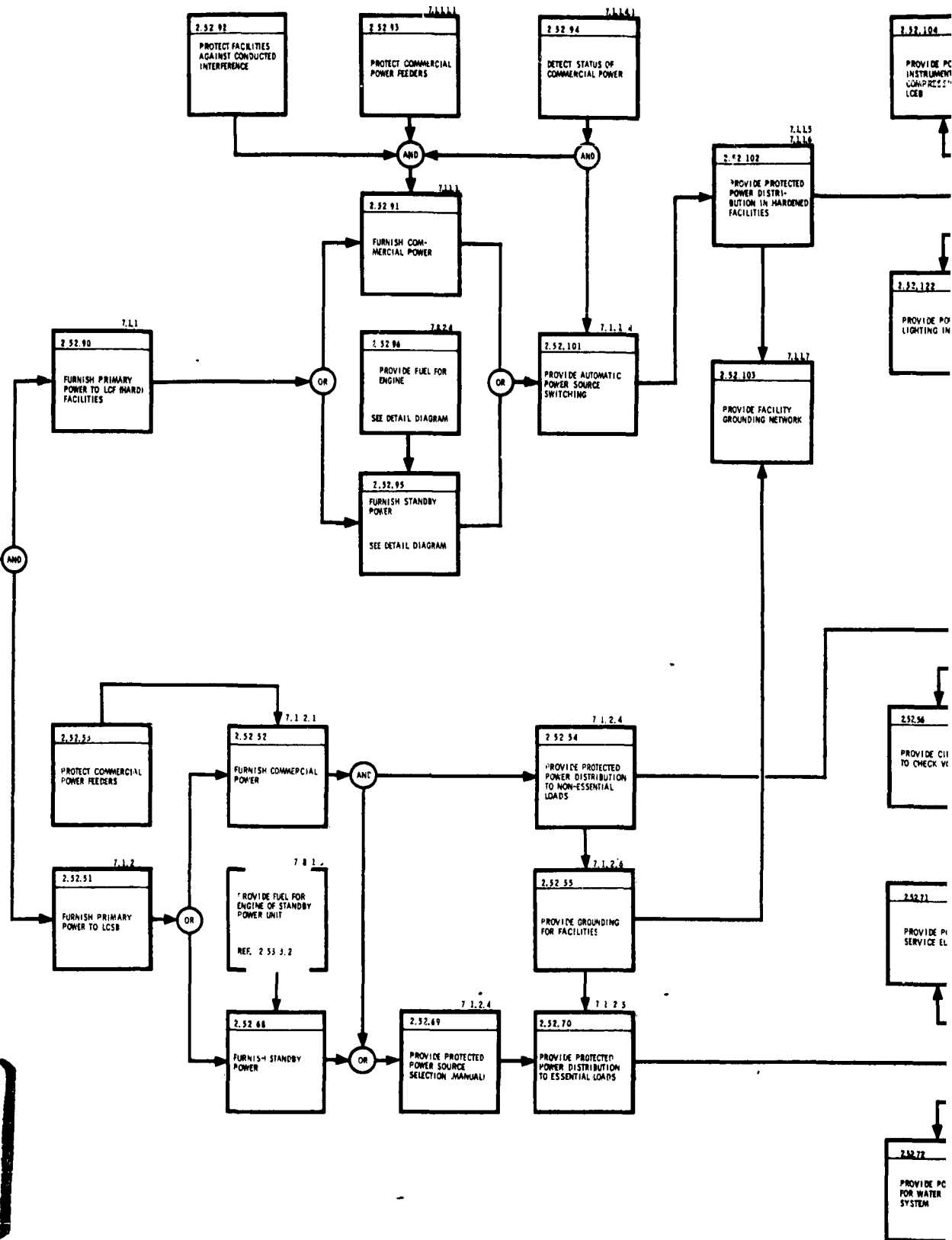
**BOEING** NO D2-30044-1B  
SEC IV PAGE 12

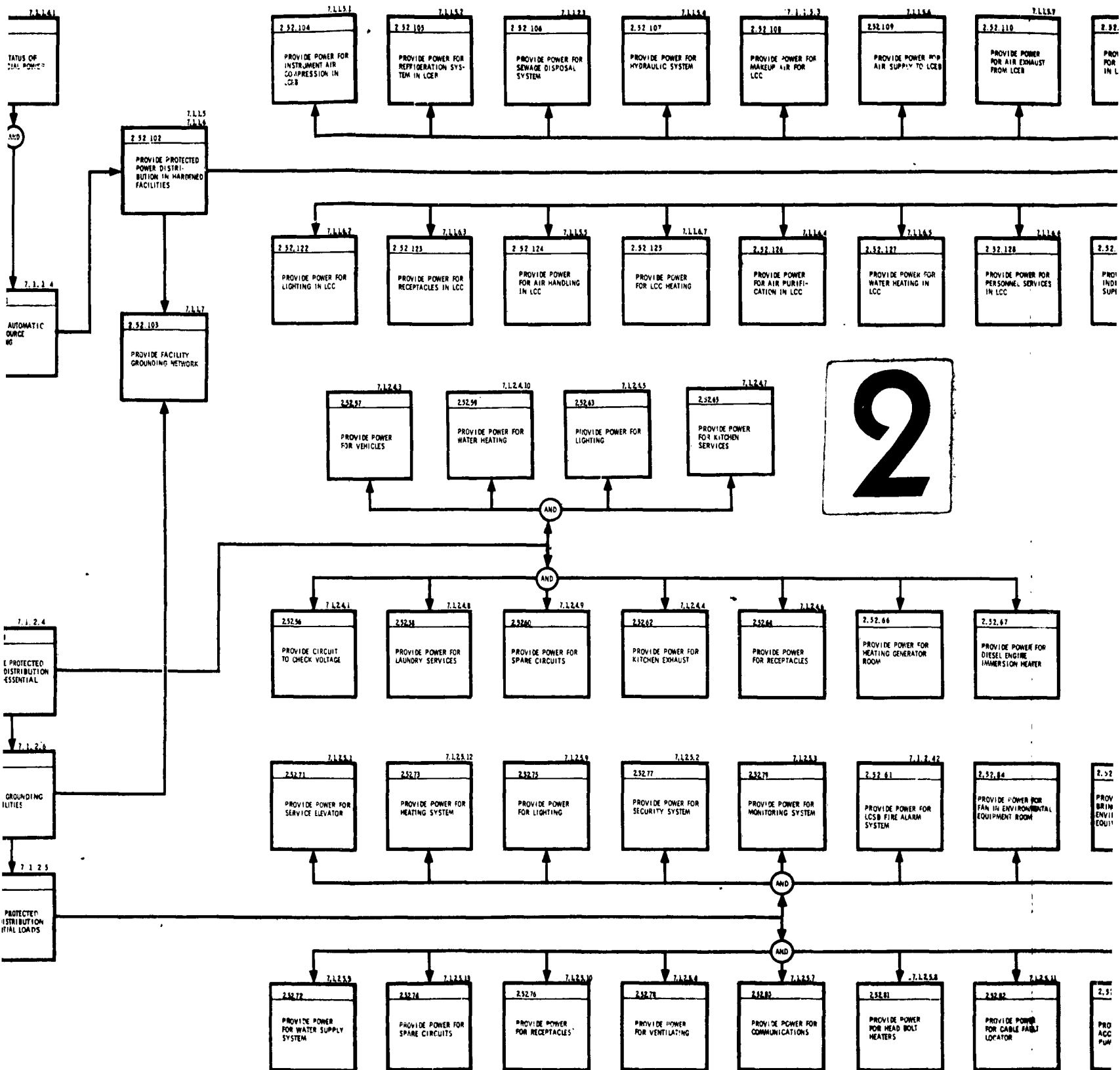
REV SYM C

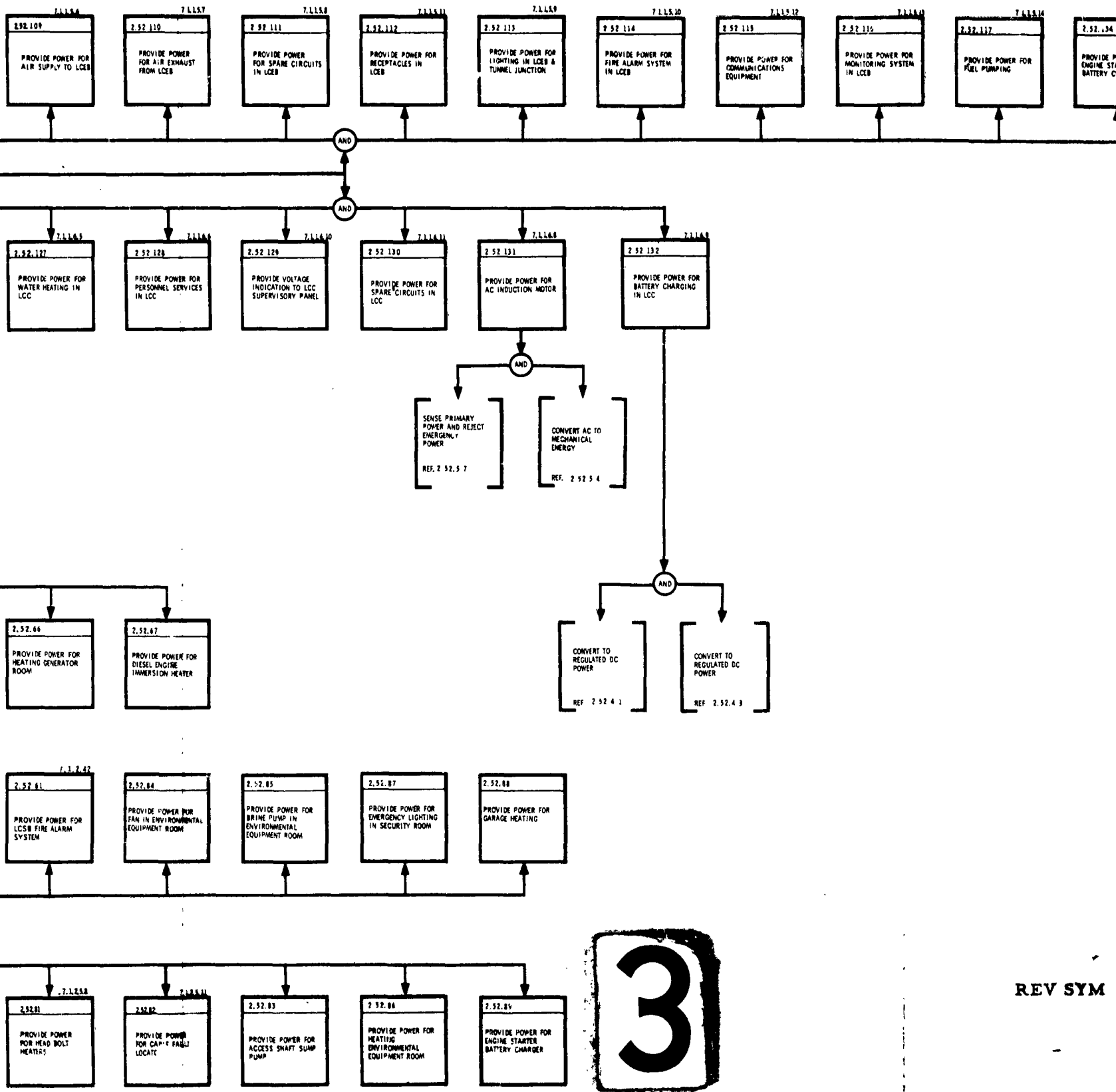
REVISION		DRAWING PREPARED BY: THE RALPH M. PARSONS CO 617 W. 7th STREET LOS ANGELES 17, CALIFORNIA 14 FEBRUARY 1968 APPD 8 MAY 1968	MINUTEMAN WING XI FLOW NAME: MONITOR RPIC LCC SH 1 OF 1 FLOW NO. 2.37
NO.	DATE		

MAINTAIN READINESS,  
MONITOR AND LAUNCH  
REF. 2.0

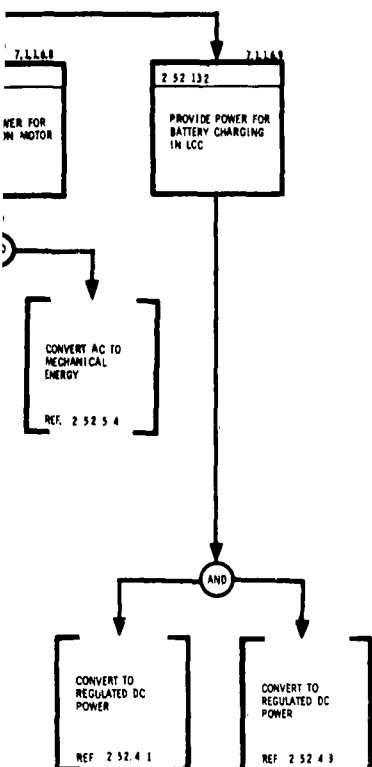
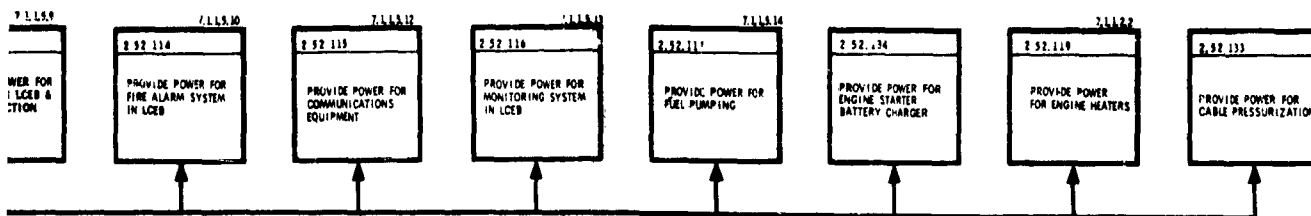
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REV SYM



4

REV SYM C

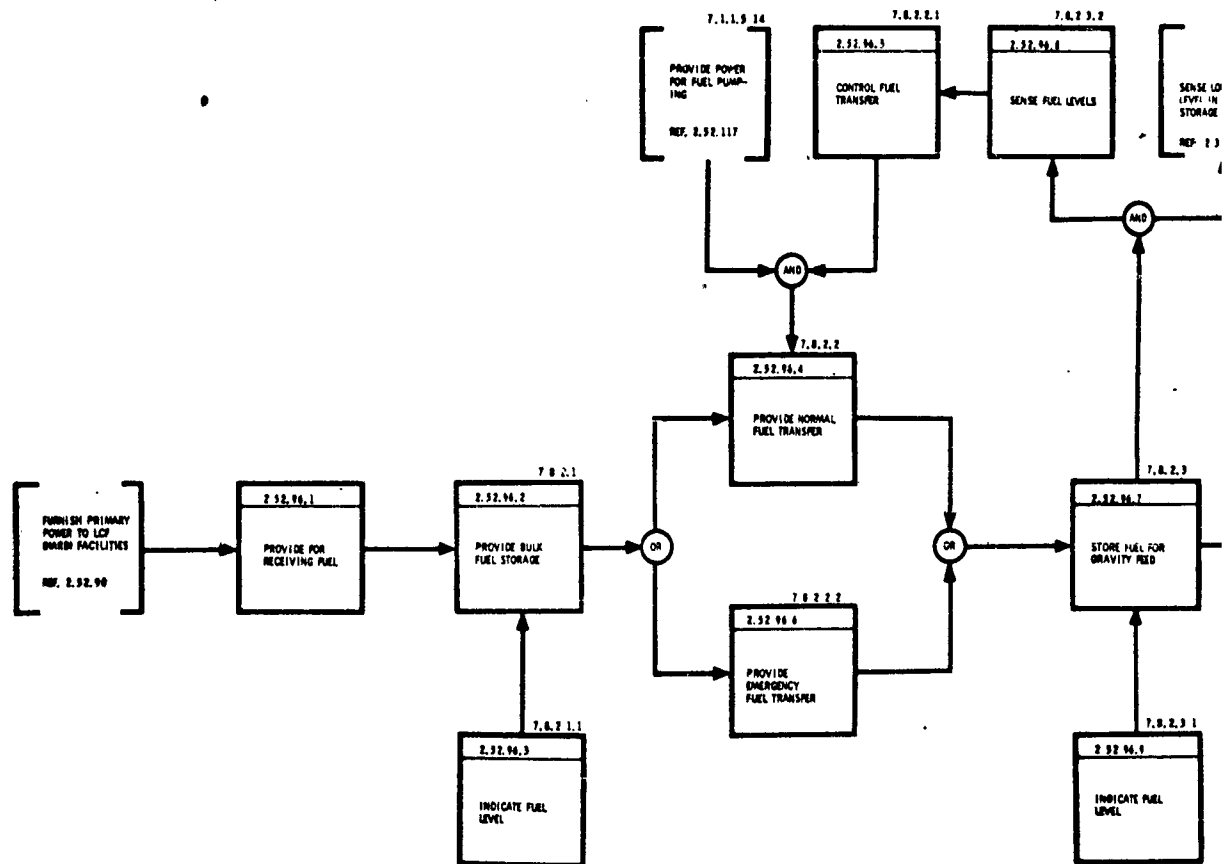
BOEING NO D2-30044-1B

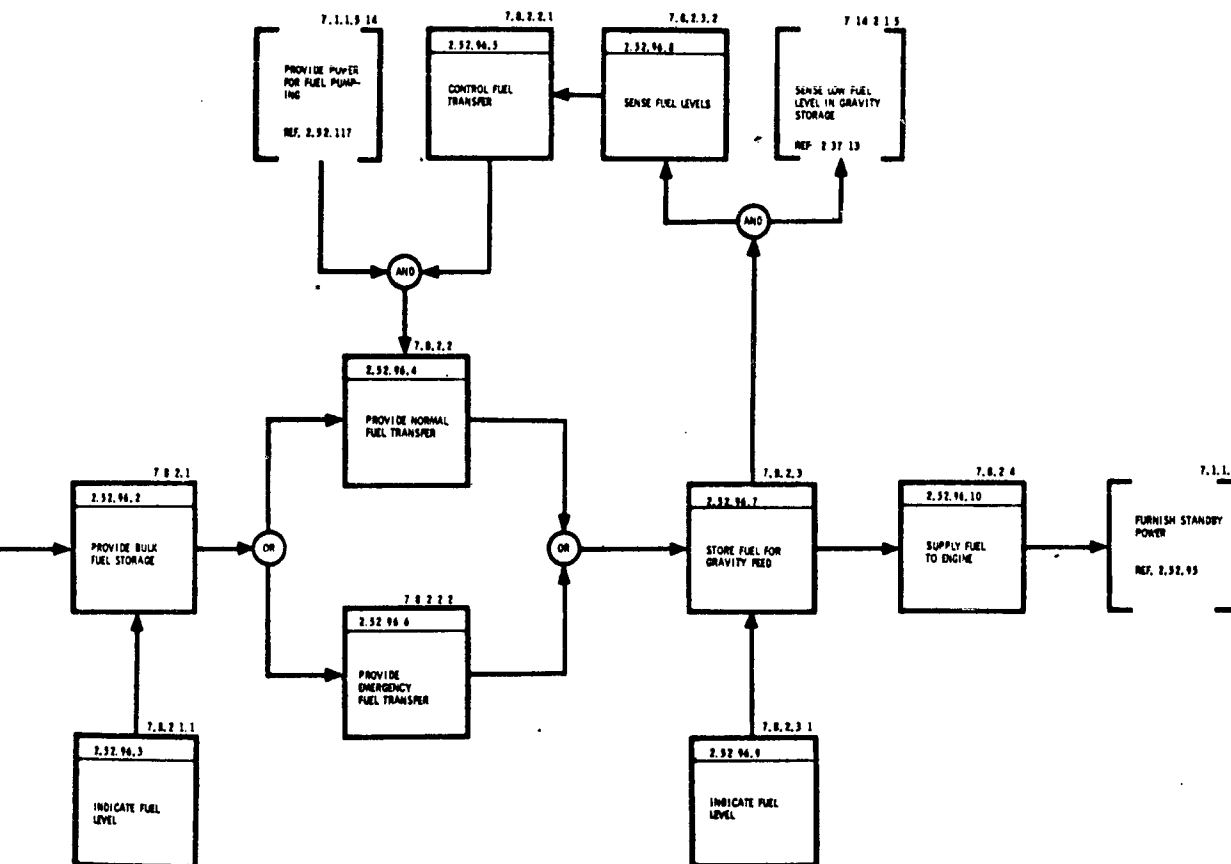
SEC IV PAGE 13

<b>BOEING</b>		DRAWING PREPARED BY:	<b>MINUTEMAN WING XI</b>
DATE	BY	THE RALPH M. PARSONS CO.	FLOW NAME:
		417 N. 7th STREET	
		LOS ANGELES 17, CALIFORNIA	PROVIDE POWER LCF
		14 FEBRUARY 1965	
		APPROVED BY	

SH 1 OF 1 (FLOW NO. 2.52)

1





# 2

REV SYM C

**BOEING**

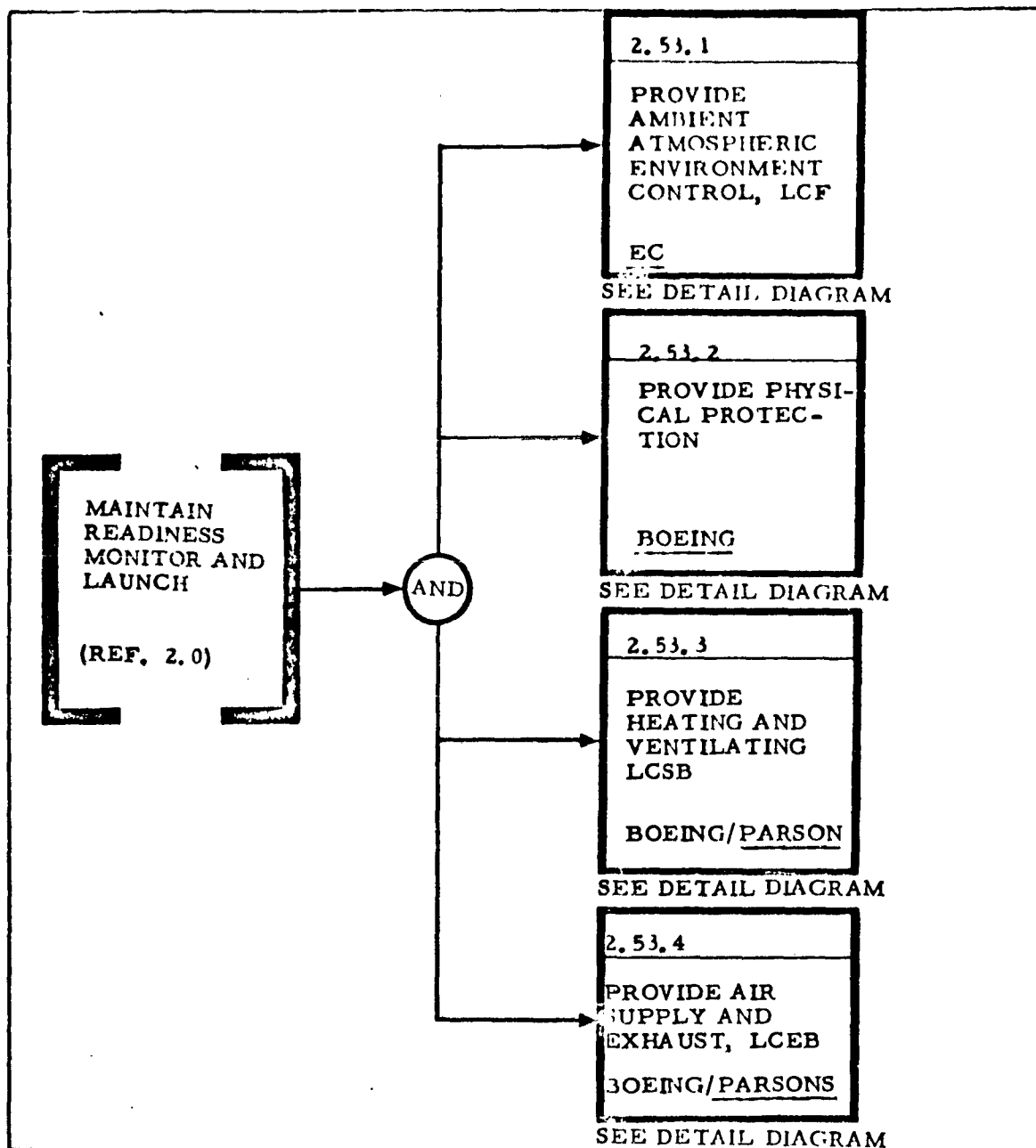
NO D2-30044-1B

SEC IV

PAGE 14

BOEING		DRAWING PREPARED BY	MINUTEMAN WING XI
REVISION	DATE	THE RALPH M. PARSONS CO. 617 W. 7TH STREET LOS ANGELES 12, CALIFORNIA 14 FEBRUARY 1963 ATD 8 MAY 60	FLOW NAME PROVIDE FUEL FOR ENGINE, LOT
			SH 1 OF 1 FLOW NO. 7.52.96





<b>BOEING</b>		DRAWING PREPARED BY:		<b>MINUTEMAN WING VI</b>	
REVISION	DATE	<b>BOEING</b>		FLOW NAME:	
		AERO-SPACE DIVISION		PROVIDE ENVIRONMENT LCF	
		W 9133B	DATE		
		DRAWN: <i>D. Tupper</i>	4-30-63		
		CHECK: <i>J. D. Lanza</i>	5-7-63		
		GROUP: <i>W. Damprey</i>	5-7-63		
		PROJECT:		SH OF	FLOW NO. 2.53

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2-6142-2

REV SYM C

**BOEING** NO. D2-30044-1B  
SECT. IV PAGE 15

7.5  
2.53.2  
PROVIDE PHYSICAL  
PROTECTION FOR THE  
LCC  
BPM

7.5.1  
2.53.2.1  
PROVIDE BLAST  
PROTECTION LCC  
ICAPSULE  
BPM

7.5.1.1  
2.53.2.2  
PROTECT FROM  
SHOCK EFFECT  
BPM

7.5.1.1.1  
2.53.2.2.2  
PROVIDE SHOCK  
ATTENUATION FOR  
CRITICAL EQUIPMENT  
BPM/BOEING

7.5.1.1.1  
2.53  
PROT  
FOR  
AND  
SHO  
BPM.1

7.5.1.1  
2.53  
PROT  
CON  
FLEX  
RIGI  
TSD  
BPM

7.5.1.2  
2.53.2.7  
PROVIDE SHOCK  
ATTENUATION FOR  
HARDENED  
COMMUNICATION  
ENTRANCES  
BPM

7.5.1.2  
2.53.2.8  
PROTECT FROM BLAST  
PRESSURE EFFECTS  
BPM

7.5.1.2.1  
2.53.2.9  
PROVIDE BLAST  
PROTECTION FOR LCC  
ICAPSULE ENTRY  
BPM

7.5.2.1.1  
2.53.2.13  
PROVIDE BLAST  
PROTECTION FOR  
ENVIRONMENTAL AIR  
OPENINGS  
BOEING

7.5.2.1.3  
2.53.2.20  
PROVIDE BLA  
VALVE CONTR  
SYSTEM  
BOEING

7.5.2  
2.53.2.11  
PROVIDE BLAST  
PROTECTION LCEB  
BPM

7.5.2.1  
2.53.2.12  
PROTECT FROM BLAST  
PRESSURE EFFECTS  
BPM

7.5.2.1.2  
2.53.2.14  
PROVIDE BLAST  
PROTECTION FOR  
HARDENED LCEB  
ENTRY  
BPM

7.5.2.1.1.1  
2.53.2.22  
MONITOR LCEB BLAST  
VALVE CONTROL  
SYSTEM STATUS  
BOEING

7.5.2.1.2  
2.53.2.23  
DISPLAY LCEB  
VALVE SYSTEM  
BOEING

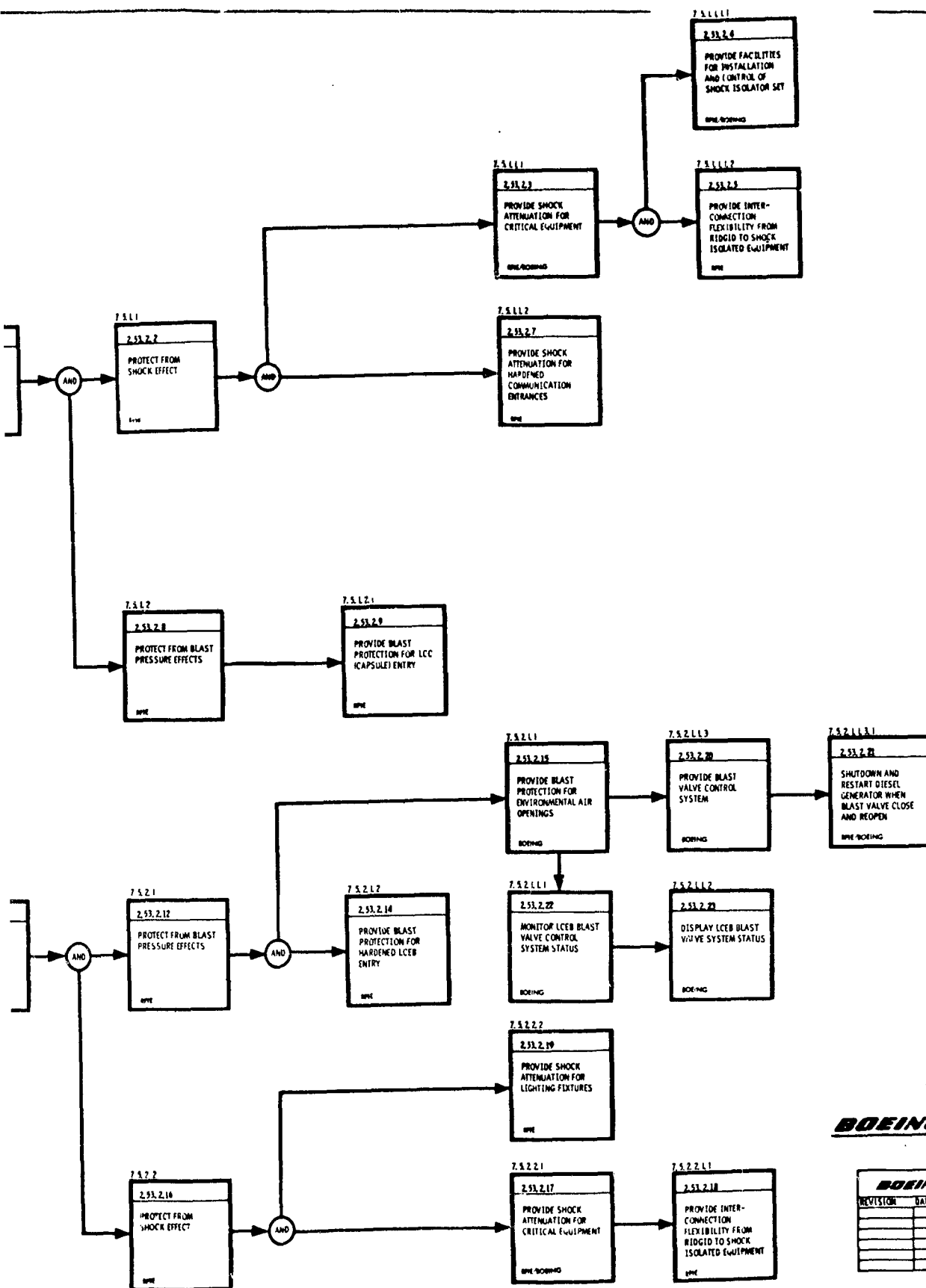
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PROVIDE SHOCK  
ATTENUATION FOR  
LIGHTING FIXTURES  
BPM

7.5.2.2  
2.53.2.16  
PROTECT FROM  
SHOCK EFFECT  
BPM

7.5.2.2.1  
2.53.2.17  
PROVIDE SHOCK  
ATTENUATION FOR  
CRITICAL EQUIPMENT  
BPM/BOEING

7.5.2.2.1  
2.53.2.18  
PROVIDE INT  
CONNECTION  
FLEXIBILITY  
RIGID TO S  
ISOLATED E  
BPM

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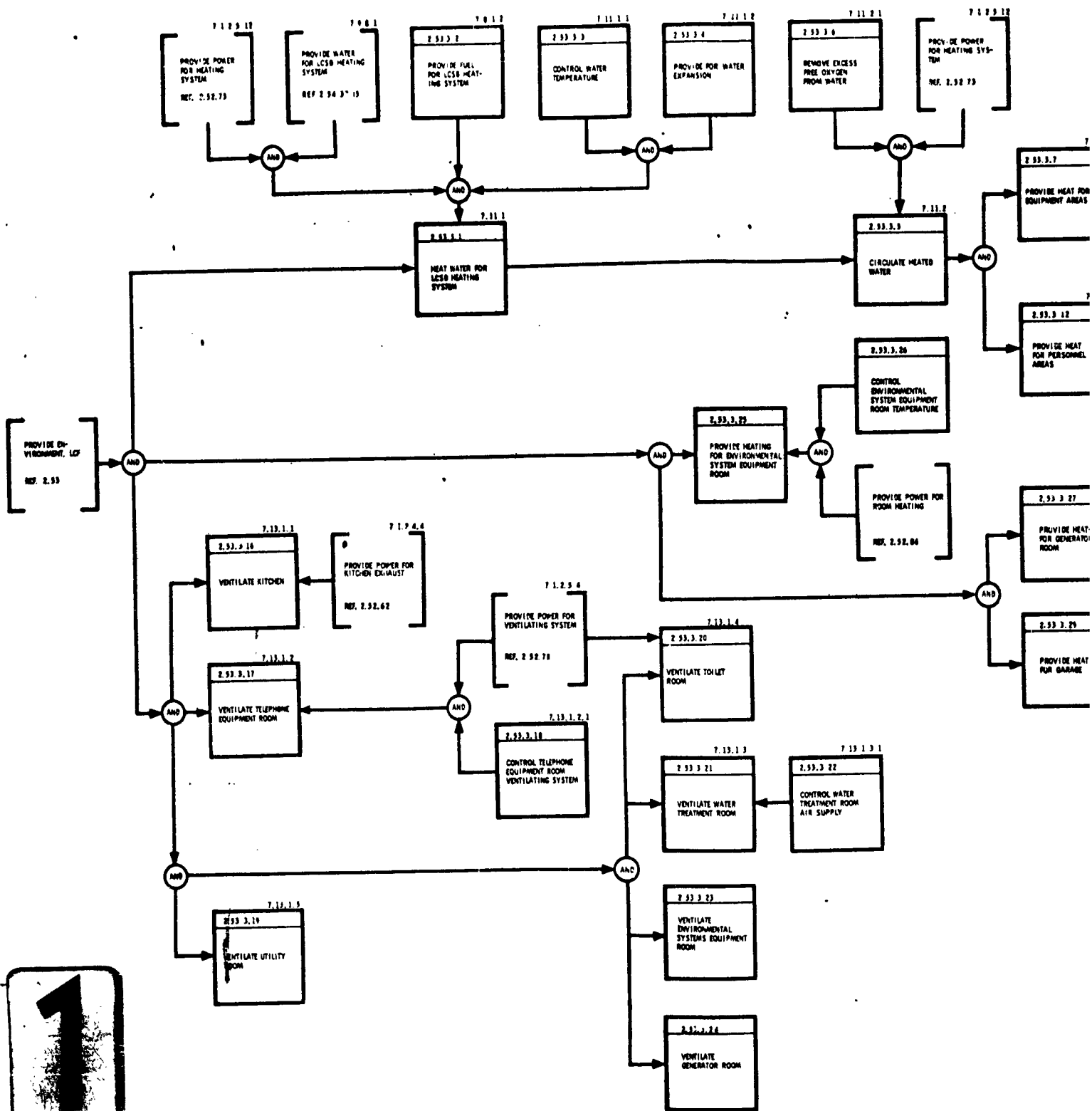
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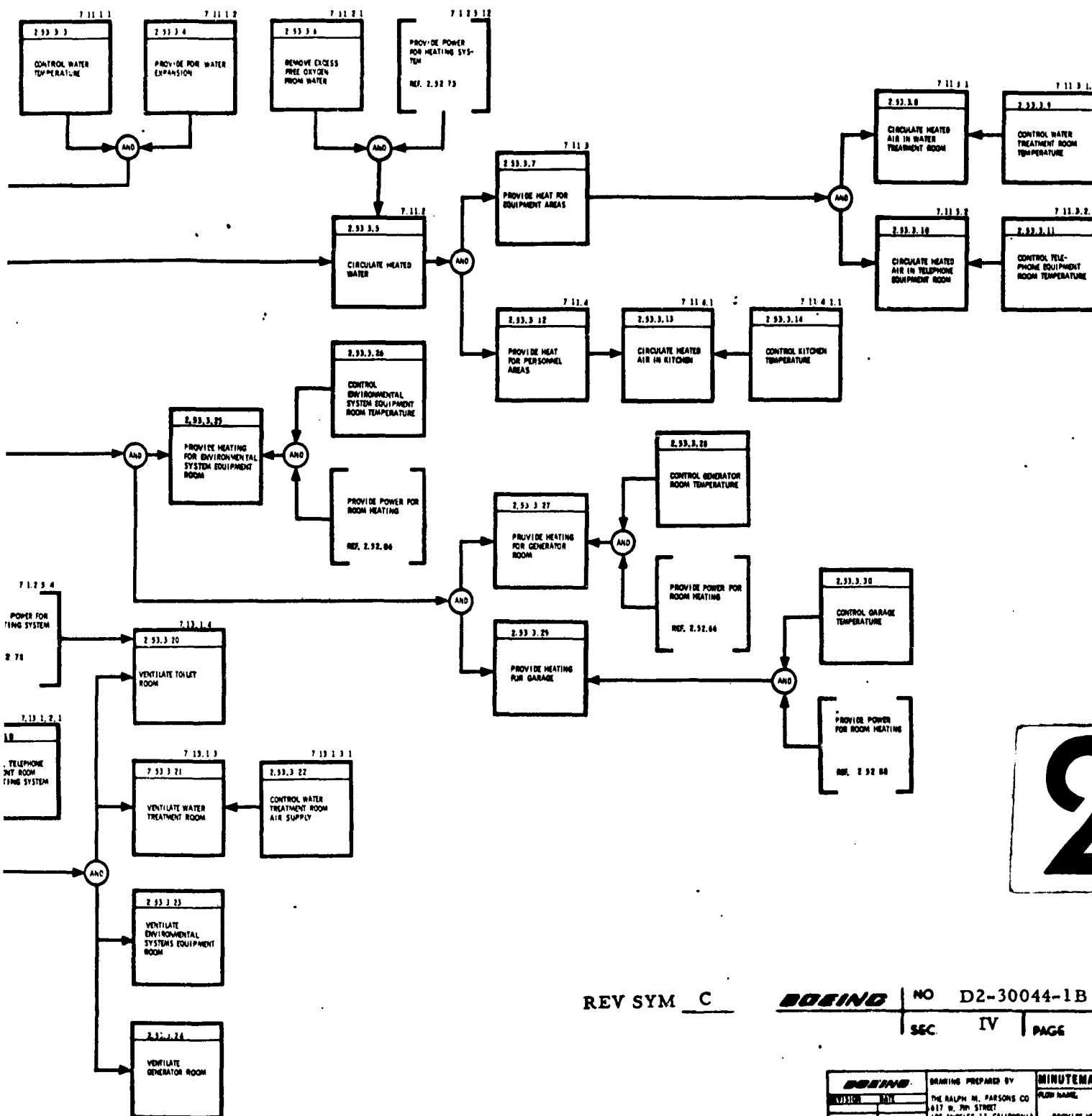
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FUNCTION NUMBERS ABOVE THE FUNCTION  
BOXES ARE WING III DWG. 25-39500 SH. 11

REV SYM C

<b>BOEING</b>		NO D2-30044-1B	
SEC. IV		PAGE 16	
DRAWING PREPARED BY: <b>BOEING</b> AERO-SPACE DIVISION		MINUTEMAN WING II	
REVISION	DATE	DRAWN	DATE
CHECKED	DATE	GROUP	DATE
PROJECT	DATE	PROJECT	DATE
PROVIDE PHYSICAL PROTECTION FOR THE LCC		SH OF FLOW NO. 2.53.2	

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REV SYM C

BOEING

NO D2-30044-1B

SEC

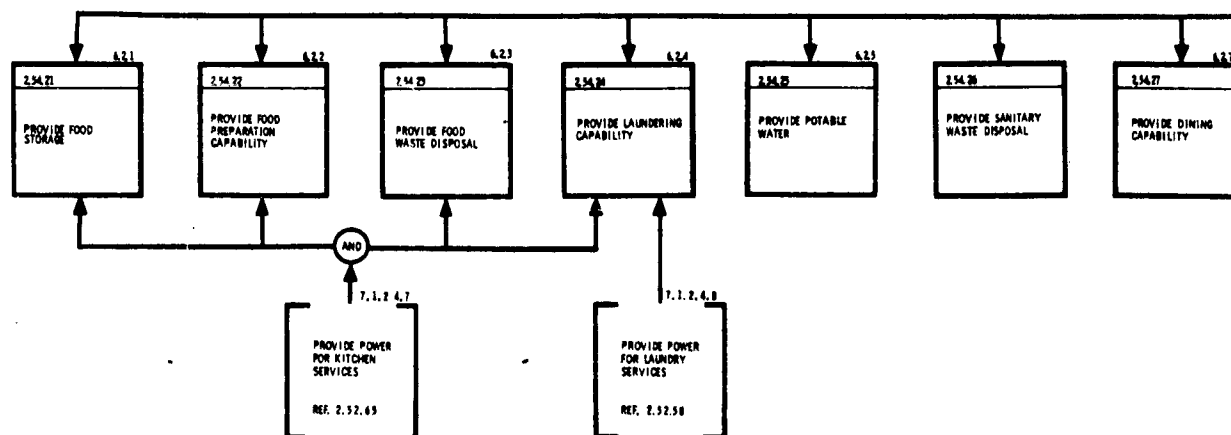
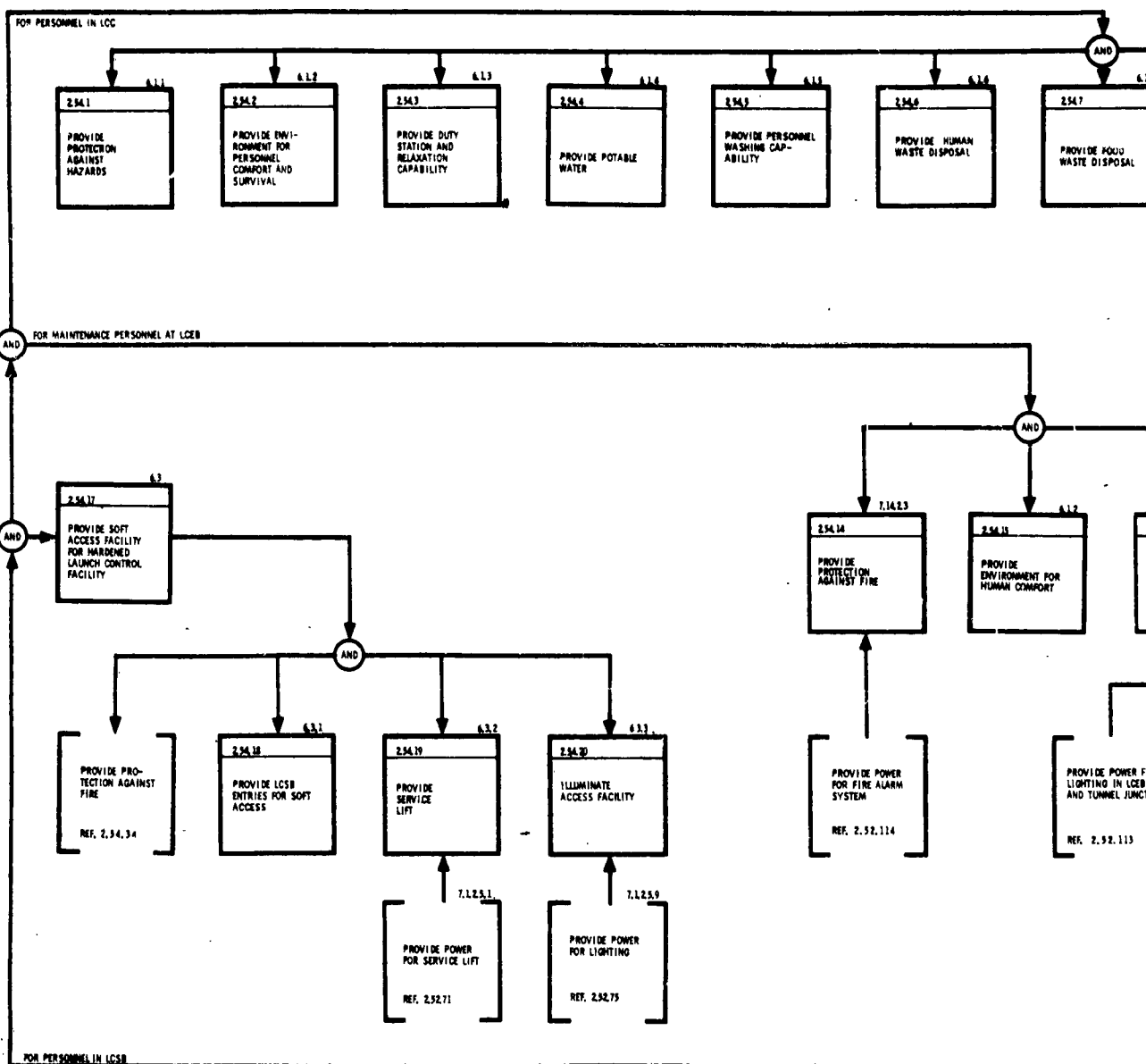
IV

PAGE

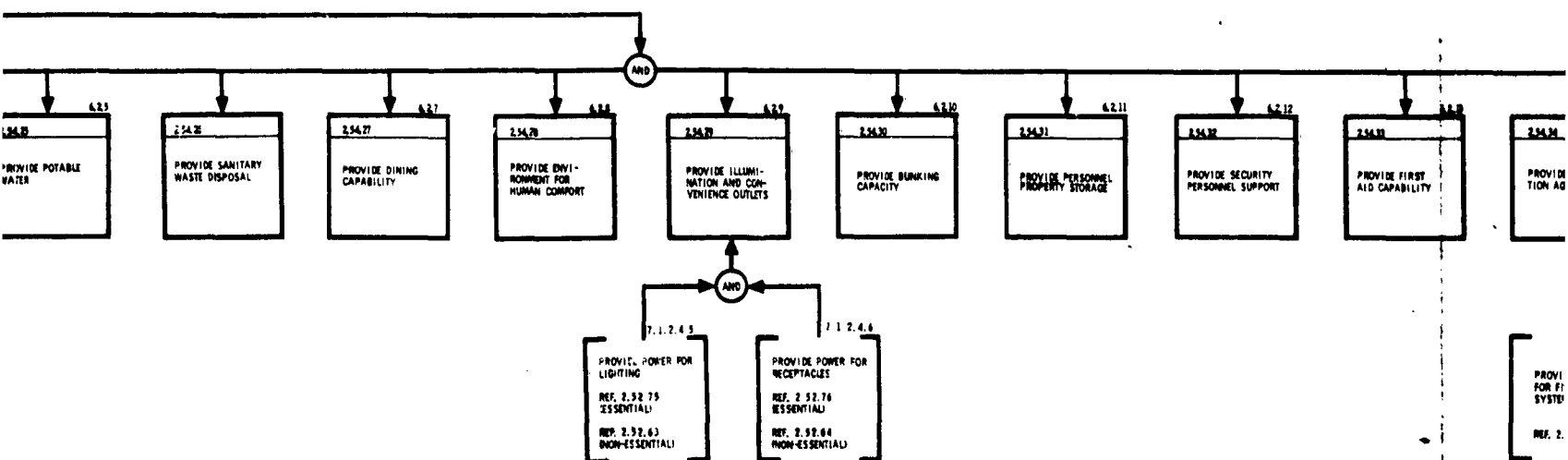
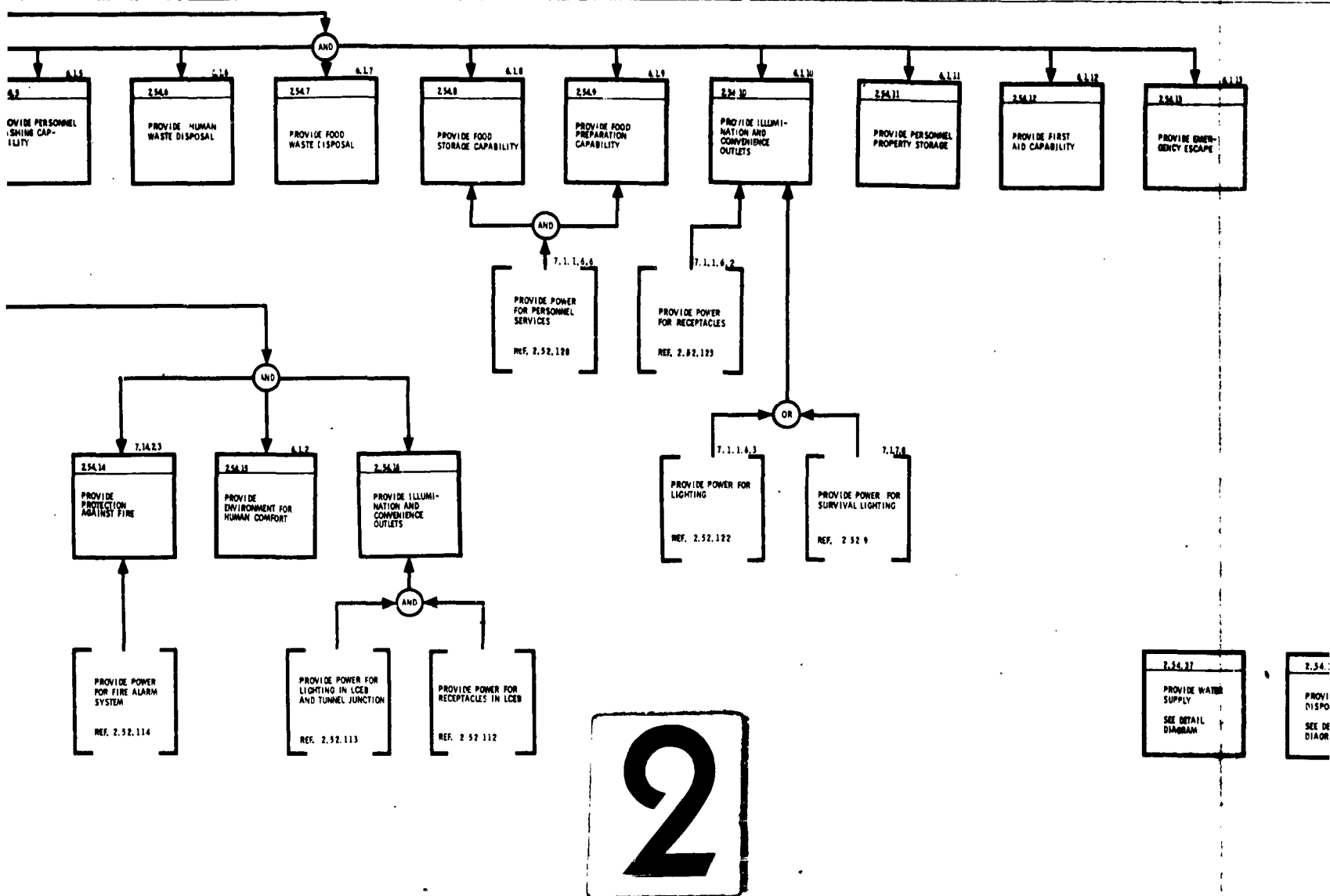
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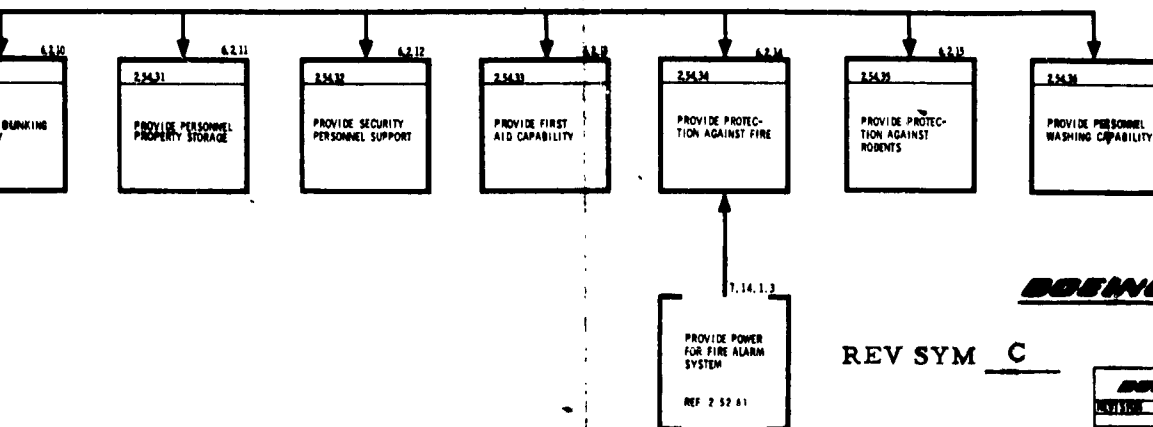
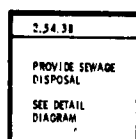
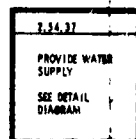
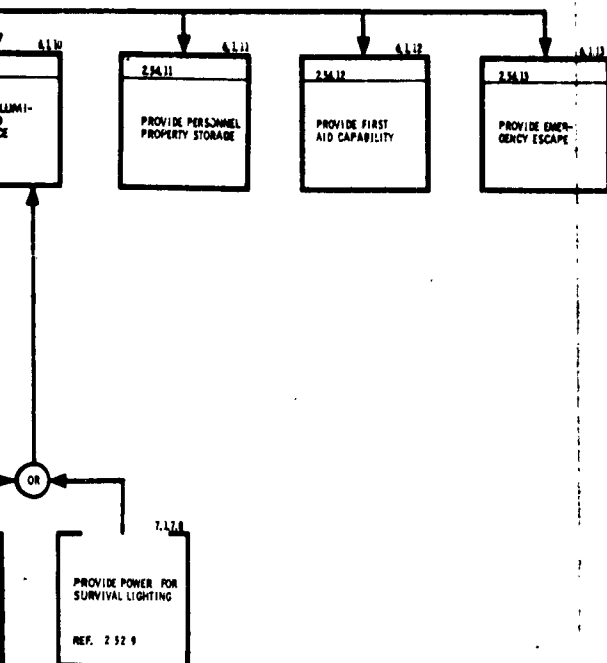
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VISION	DATE	THE RALPH M. PARSONS CO		FLOW NAME	
		817 W. 7TH STREET		PROVIDE HEATING AND	
		LOS ANGELES 17, CALIFORNIA		VENTILATING, LC30	
		14 FEBRUARY 1963			
		APPRO 5 MAY 1968			
				SH 127.1 (FLOW NO. 2.53.3)	

MAINTAIN  
READINESS, MONITOR  
AND LAUNCH  
REF. 2.0



1





3

REV SYM C

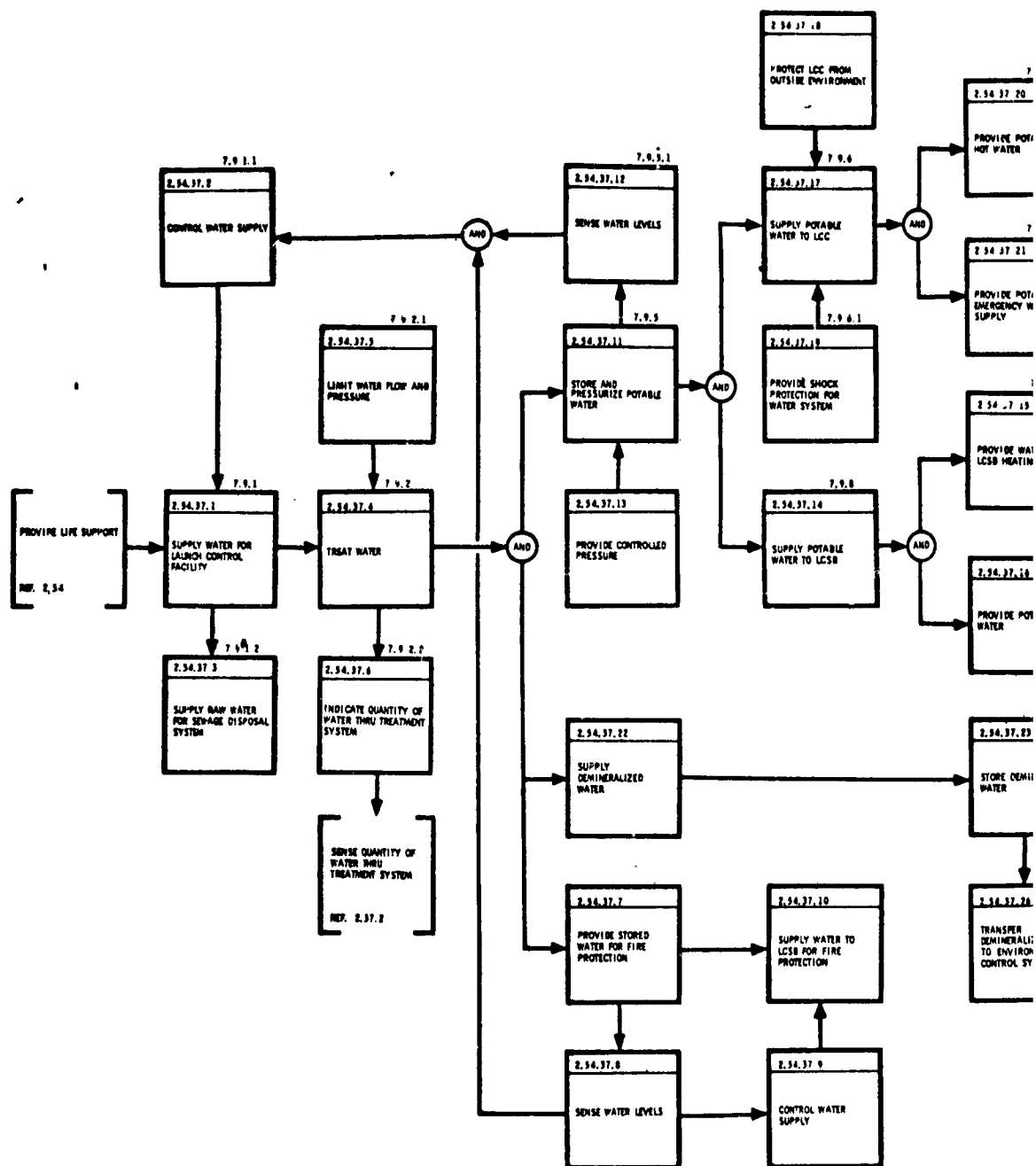
NO D2-30044-1B

SEC IV

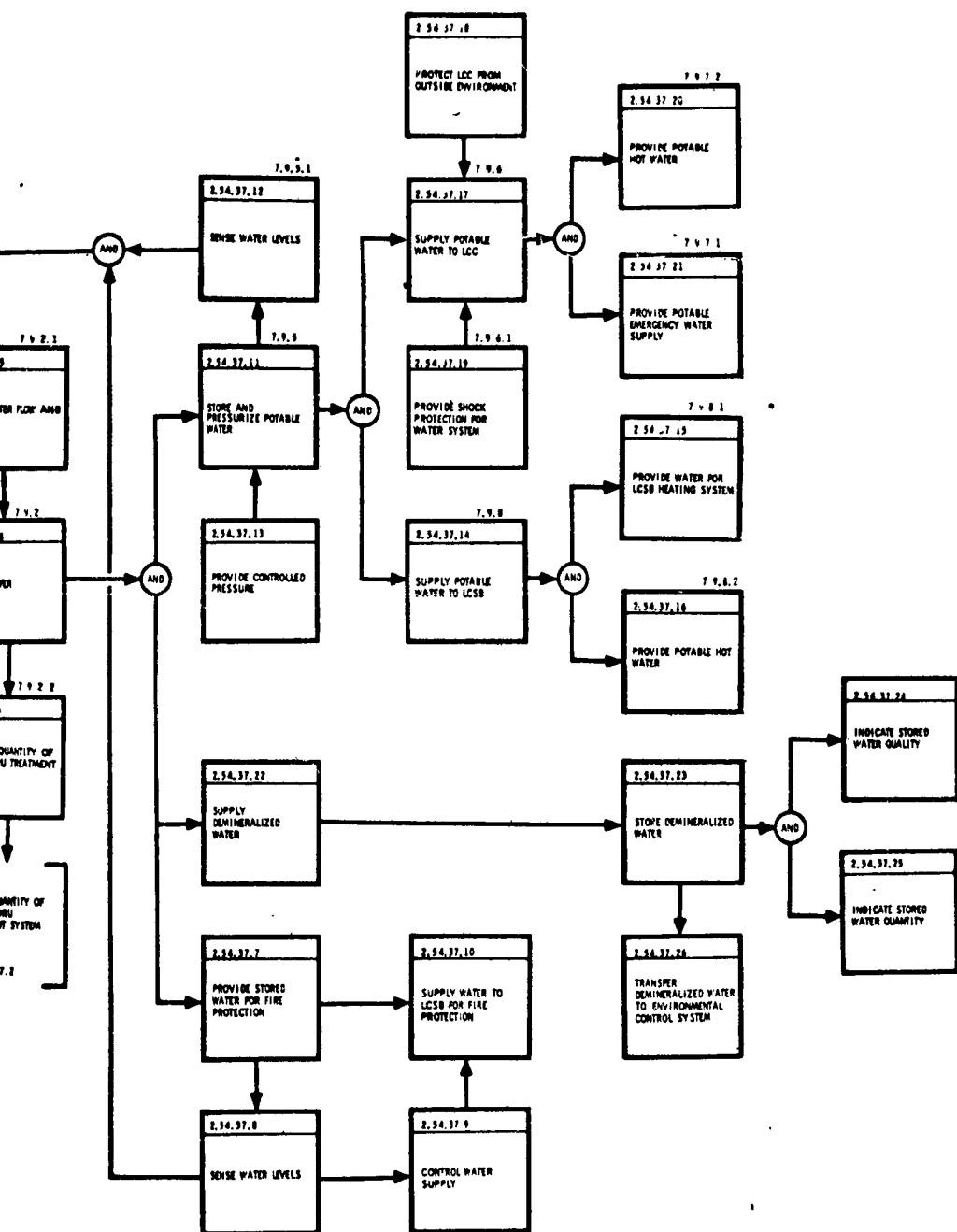
PAGE 18

<b>REVISION</b>		DRAWING PREPARED BY: THE RALPH W. PARSONS CO. 617 W. 7th STREET LOS ANGELES 17, CALIFORNIA 14 FEBRUARY 1963 APPD 8 MAY 1963	<b>MINUTEMAN WING II</b> FLOW NAME: PROVIDE LIFE SUPPORT LEP
SHEET 1 FLOW NO. 2.54			





1



PROVIDE POWER FOR  
WATER SUPPLY SYSTEM  
REF. 2.52.72

2

REV SYM C

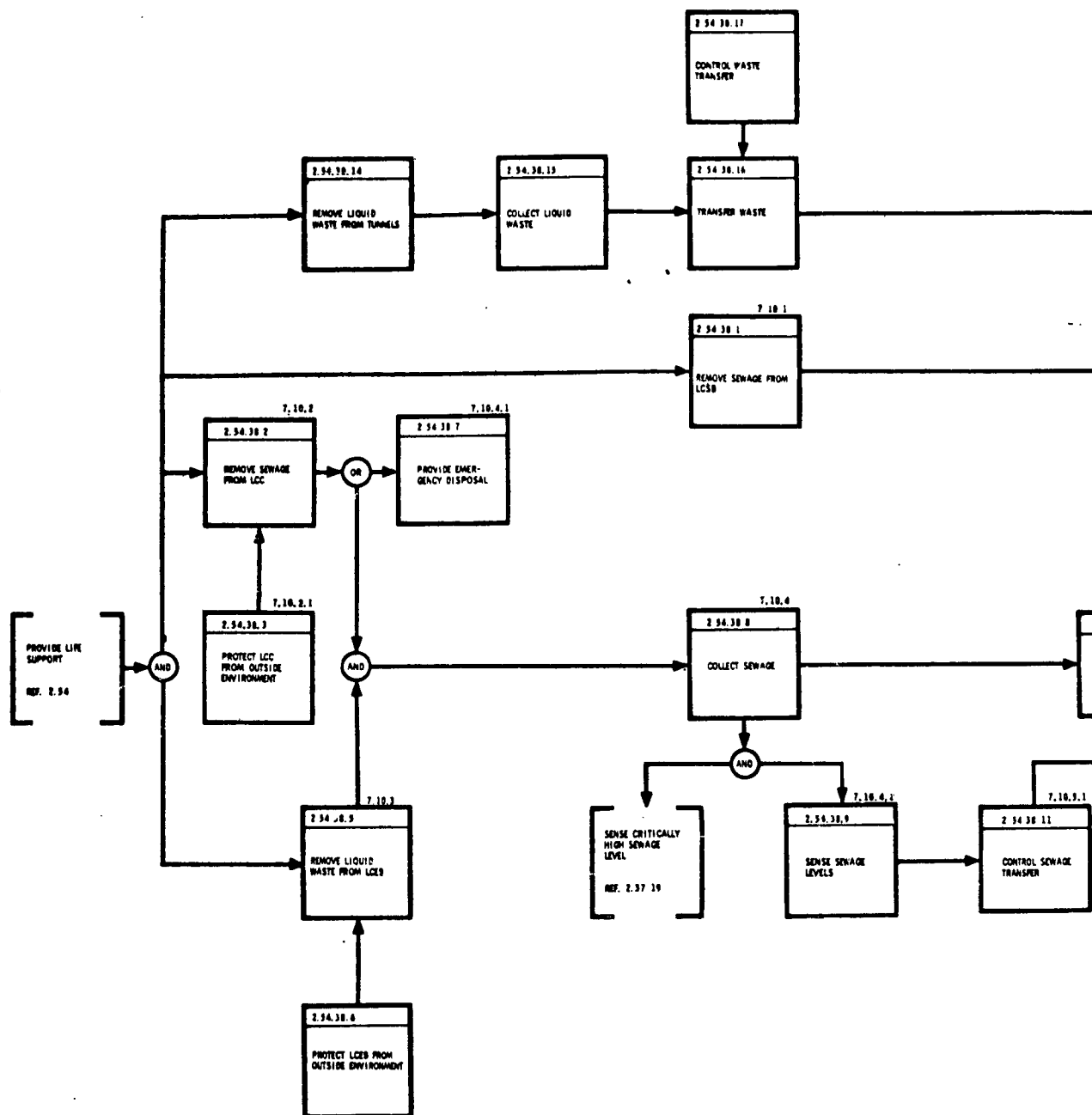
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NO D2-30044-1B

SEC. IV

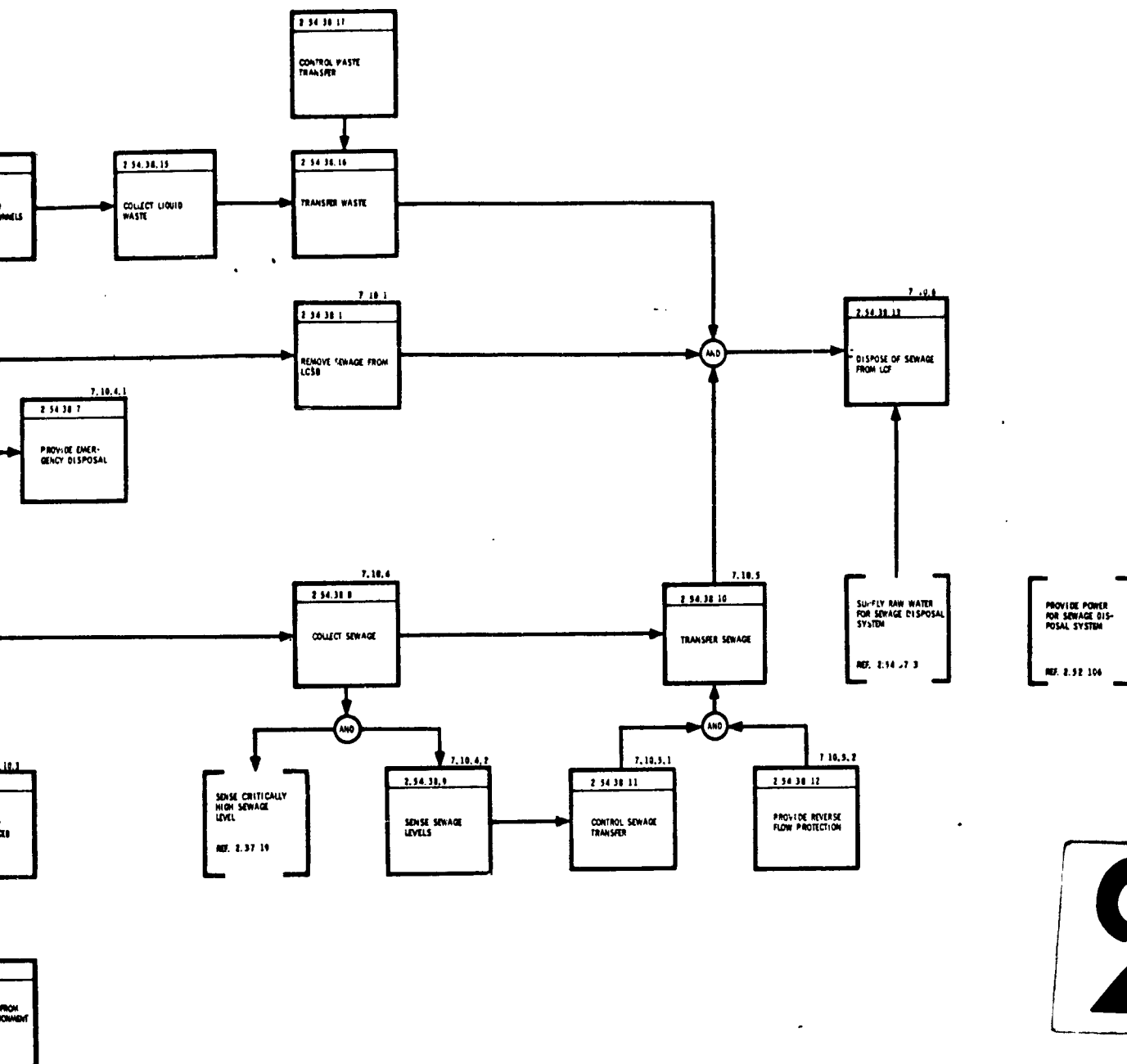
PAGE 19

DRAWING PREPARED BY:		MINUTEMAN WING XI
DESIGNER	DATE	FLOW NAME
THE RALPH M. PARSONS CO.	617 P. 20 STREET	PROVIDE WATER SUPPLY, LOC
LOS ANGELES 17 CALIFORNIA	14 FEBRUARY 1961	
AP-0 8 MAY 1961		
		SH 1 OF 1 FLOW NO. 2 54 37



1

REV SY



# 2

REV SYM C

**BOEING**

NO. D2-30044-13

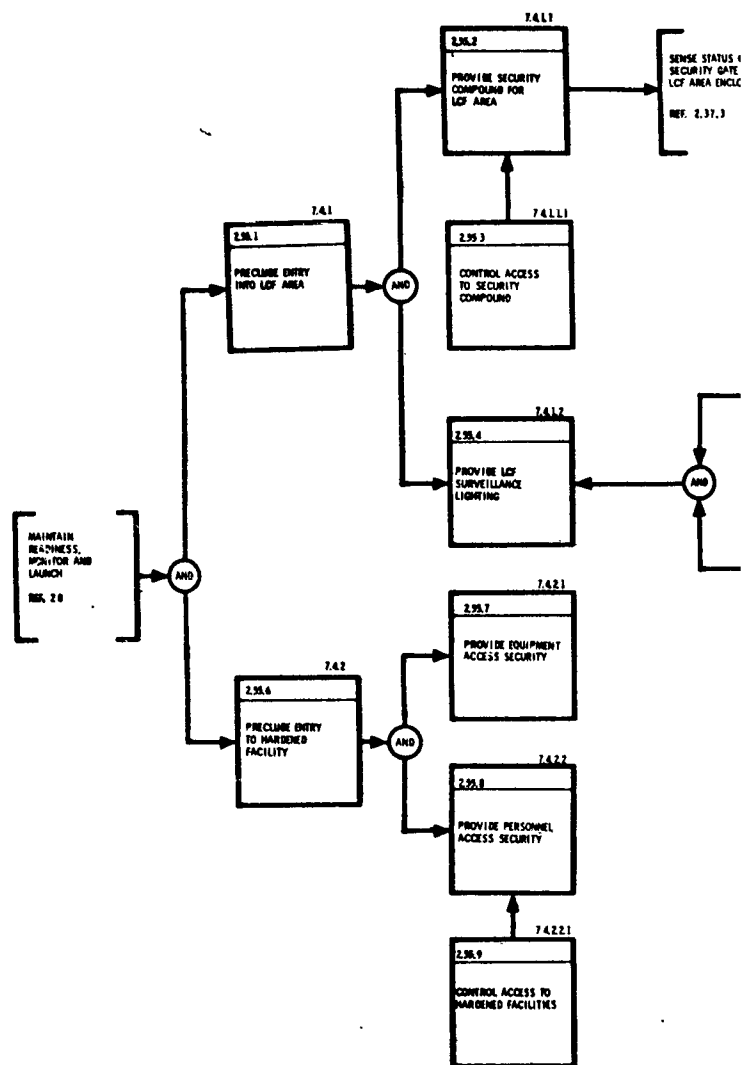
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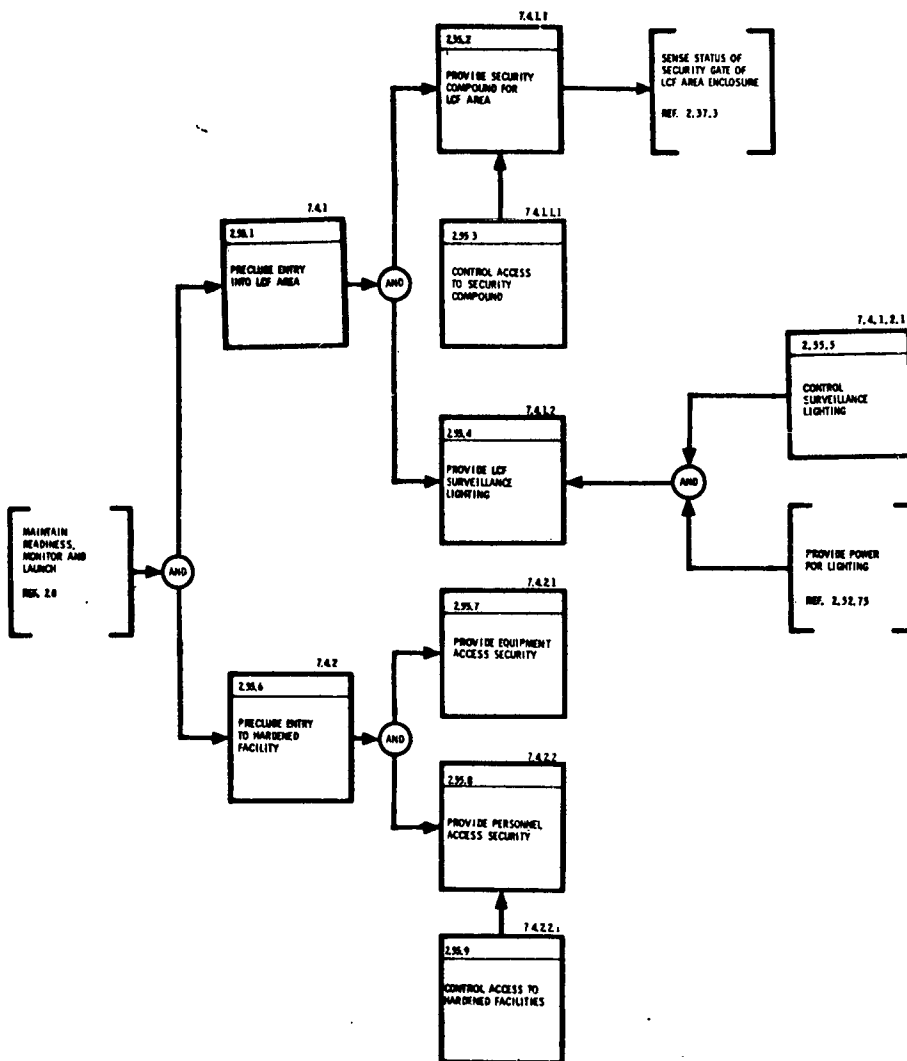
IV

PAGE 20

BOEING		DRAWING PREPARED BY:		MINUTEMAN WING XI
REVISION	DATE	THE RALPH M. PARSONS CO.		FLOW NAME
		617 P. 7TH STREET		PROVIDE SEWAGE DISPOSAL
		LOS ANGELES 17, CALIFORNIA		LCF
		14 FEBRUARY 1963		
		A-2 8 MAY 1963		
				SH LOP 1 FLOW NO. 2.54.38

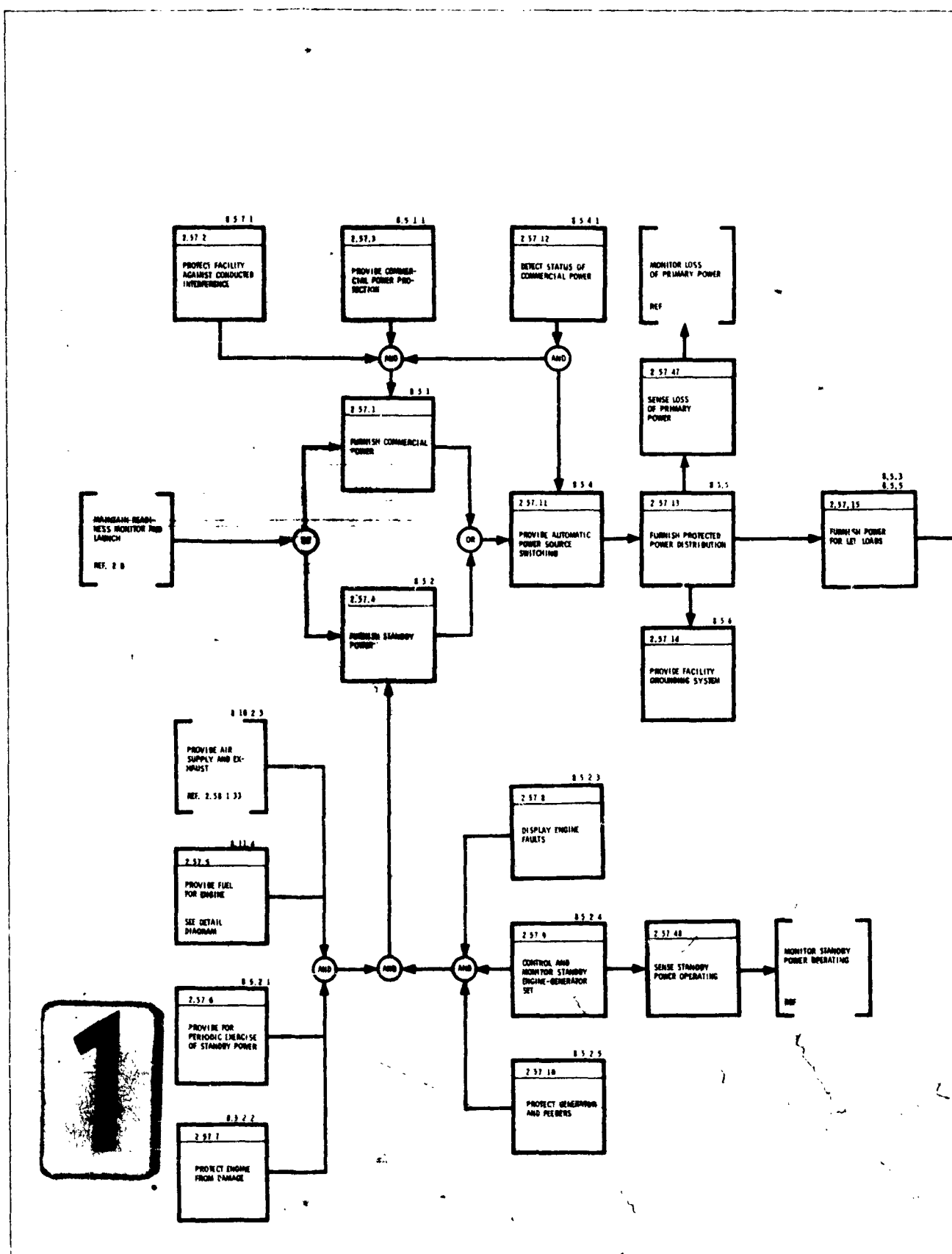
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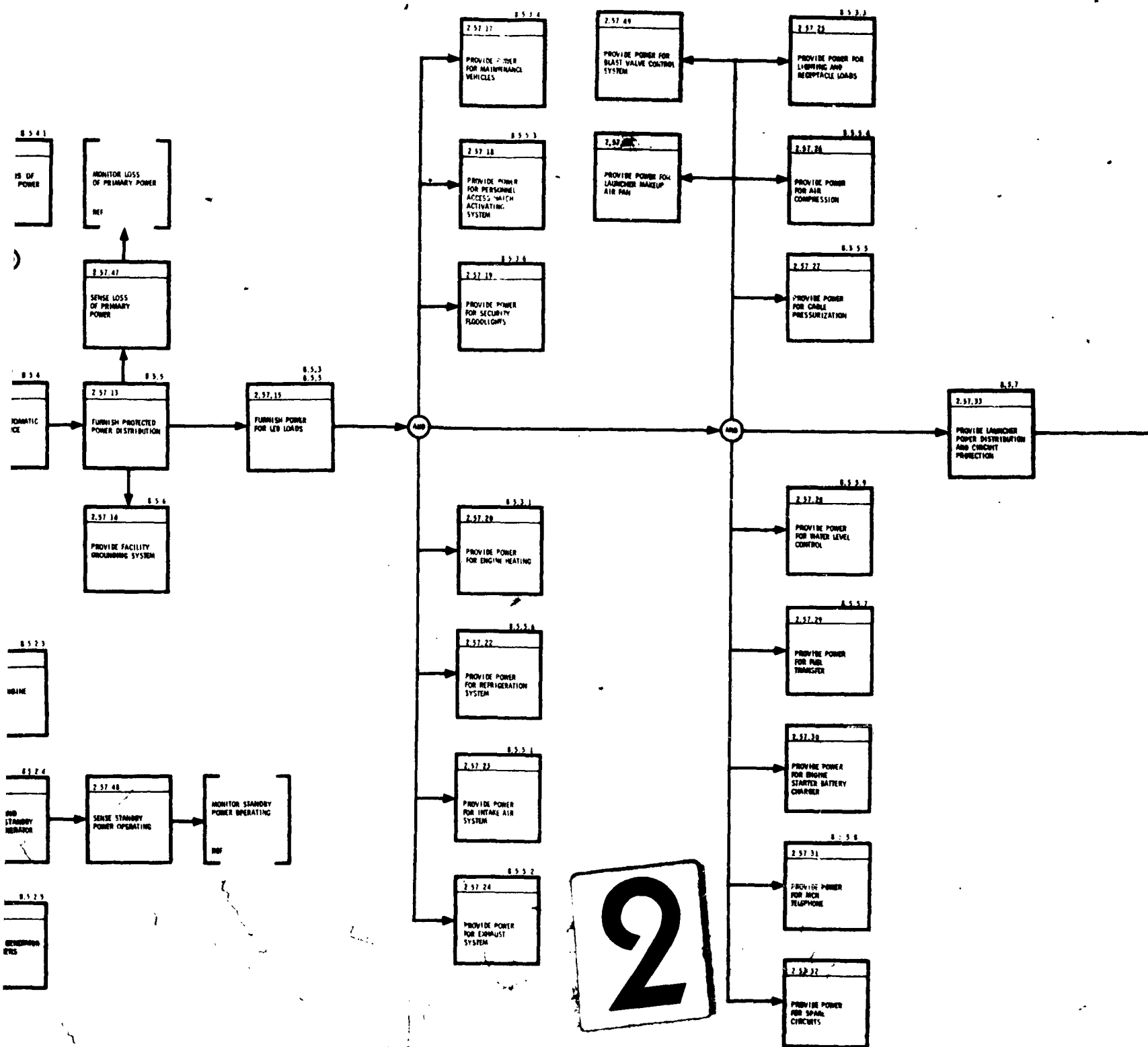




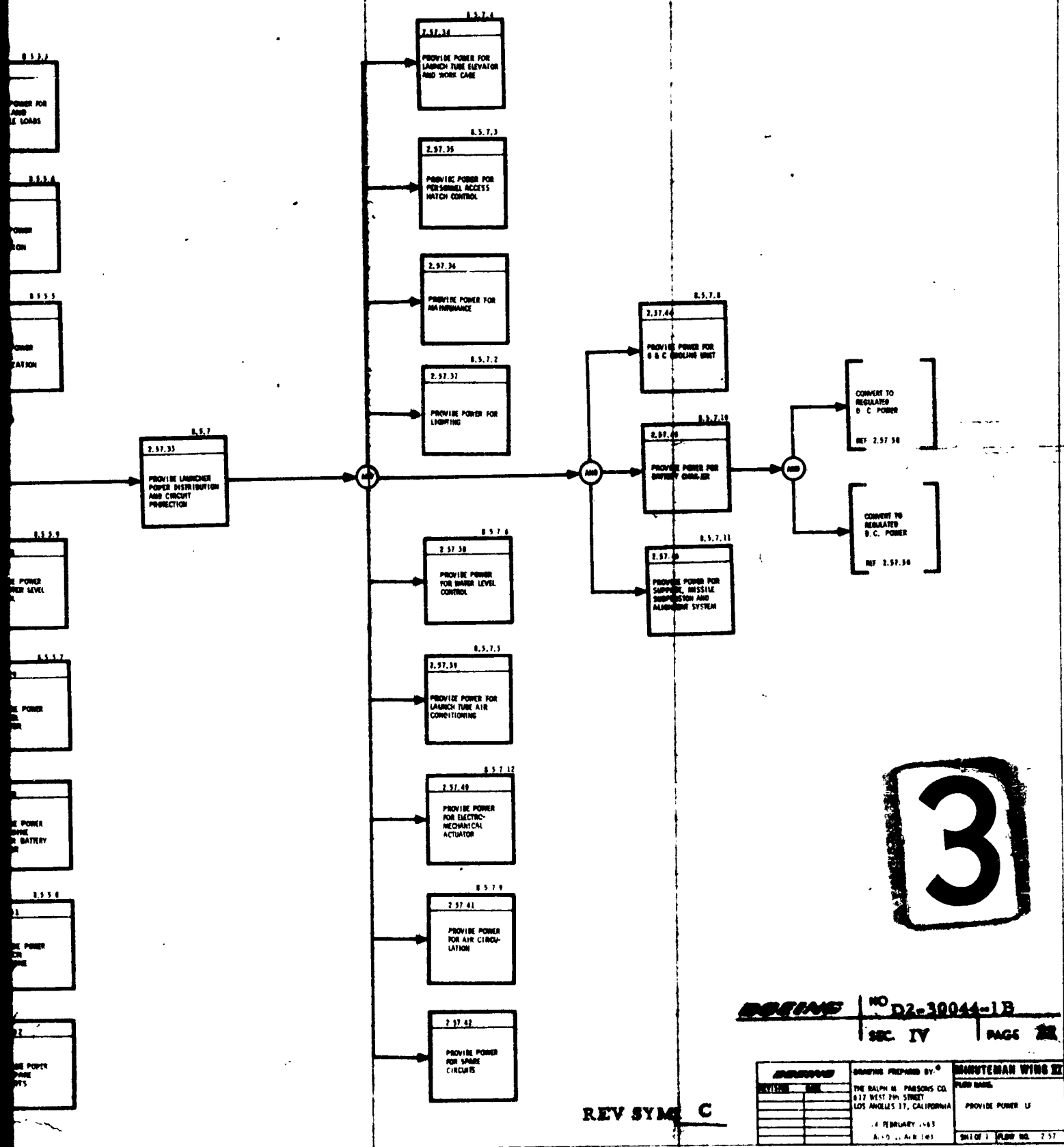
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<b>BOEING</b>		NO D2-30044-1B	
SEC. IV		PAGE 21	
REV SYM C		DRAWING PREPARED BY: MINUTEMAN WING XI	
REVISION		THE RALPH M. PARSONS CO. 617 WEST 7TH STREET LOS ANGELES 17, CALIFORNIA	
DATE		FLOW NAME: PROVIDE SECURITY, LCF	
		18 FEBRUARY 1963	
		A10 D 11 A'R 204	
		SHEET 1 FLOW NO. 2.55	







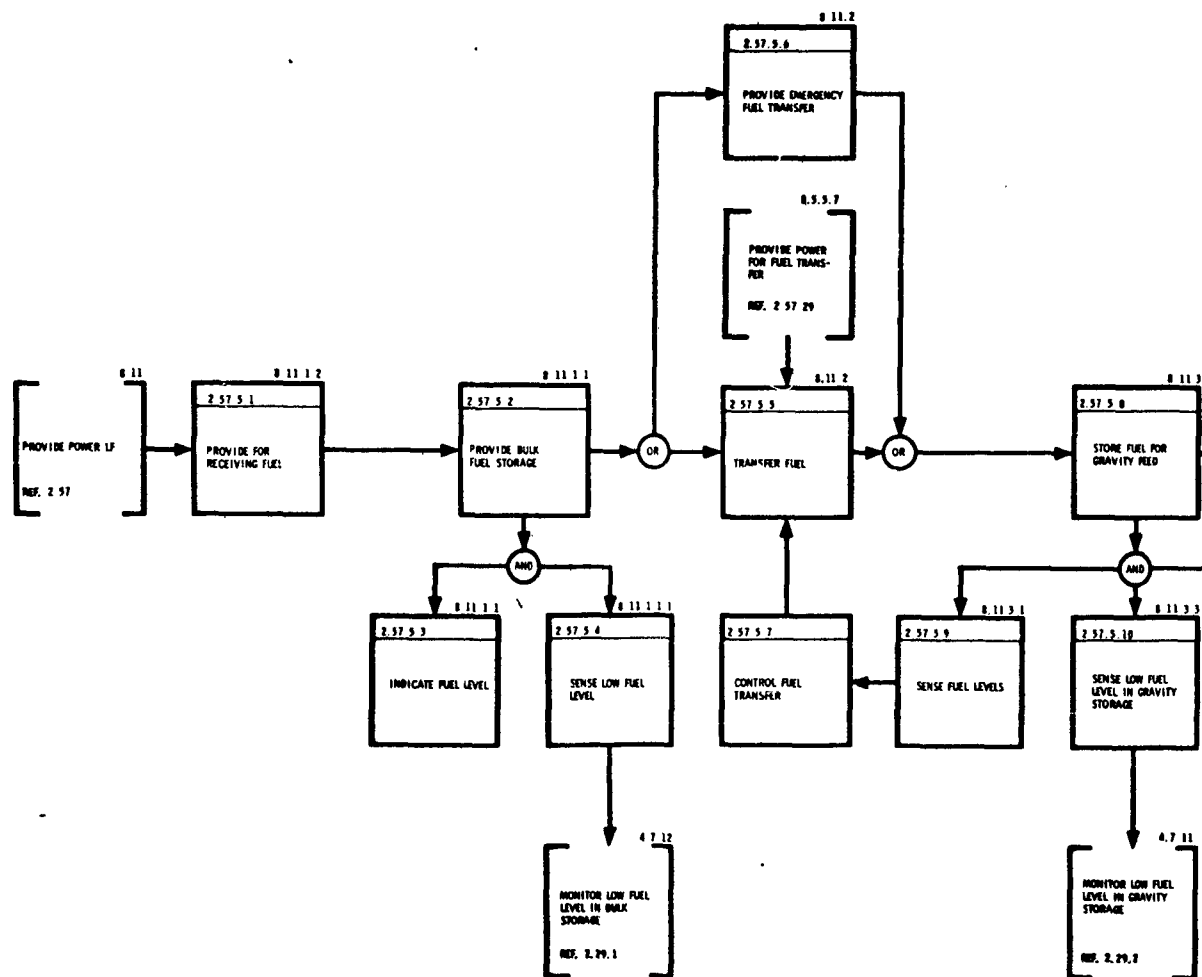


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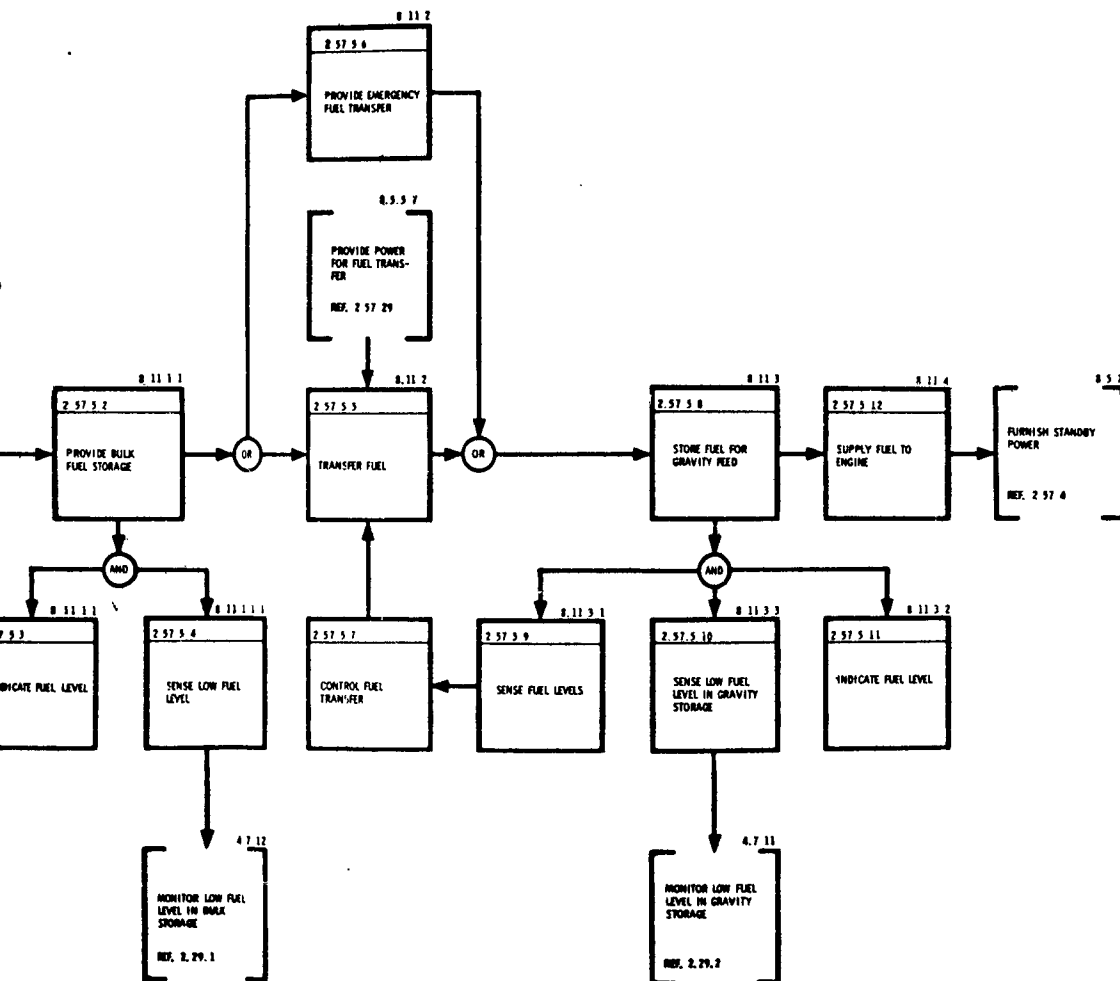
NO D2-30044-1B  
SEC IV PAGE 22

REV SYM C

REVISION		DRAWING PREPARED BY:		DRAWINGMAN WING 22	
NO.	DATE	THE RALPH M. PARSONS CO.	PLANT NAME	PROVIDE POWER 12	
		617 WEST 7TH STREET			
		LOS ANGELES 17, CALIFORNIA		SHEET 1 OF 1 DRAWING NO. 2.57	
		4 FEBRUARY 1963			
		A-20 11 A-R 145			



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2

REV SYM C

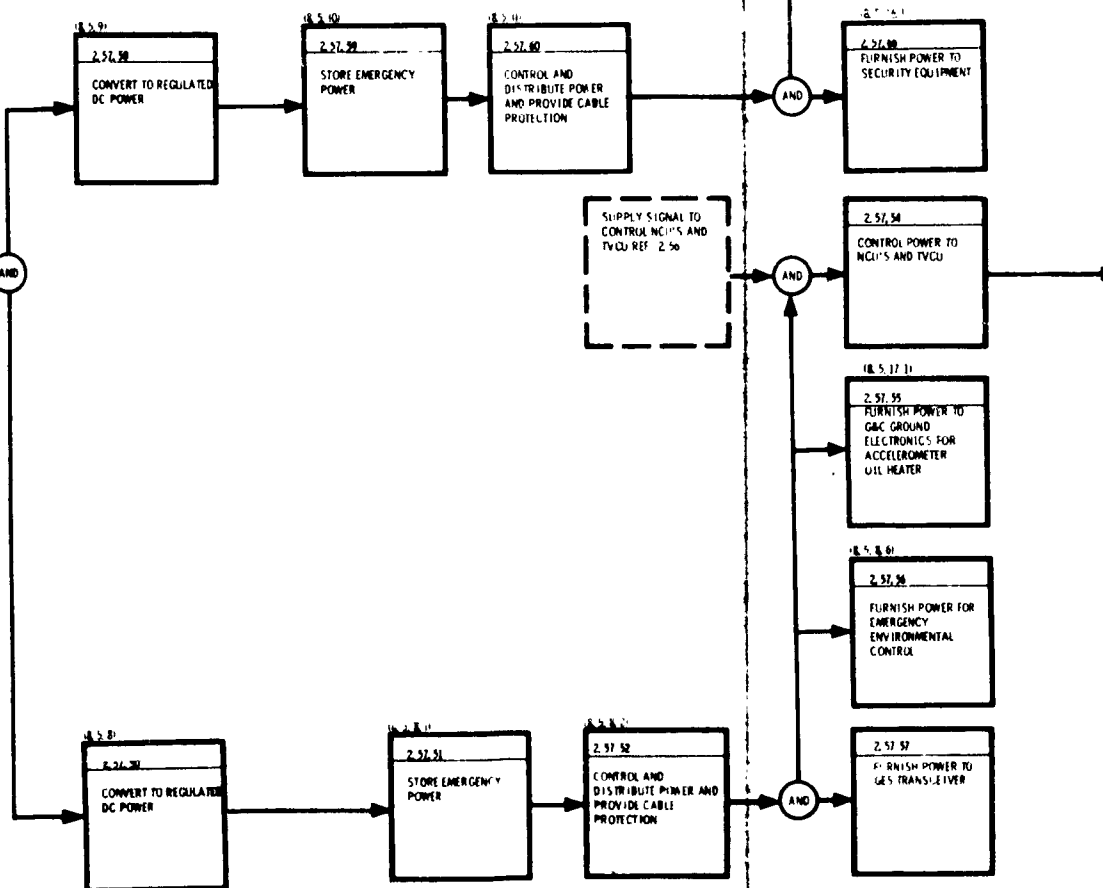
**BOEING** NO D2-30044-1B

SEC. IV PAGE 23

<b>BOEING</b>		DRAWING PREPARED BY:	MINUTEMAN WING II
DATE:	BY:	THE RALPH M. PARSONS CO.	FLOW NAME:
		617 W. 7th STREET	
		LOS ANGELES 17, CALIFORNIA	PROVIDE FUEL FOR ENGINE 12
		14 FEBRUARY 1963	
		APPD 11 APR 1963	SH 107 1 FLOW NO. 2.57.5

PROVIDE POWER FOR  
BATTERY CHARGERS  
(RPIE)  
REF 2.57.49

1





3

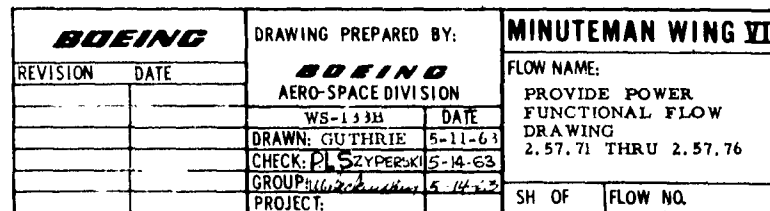
NOTE  
FUNCTION NUMBERS ABOVE THE BOXES  
ARE WS-133A DWG 25-18771 SMT 14

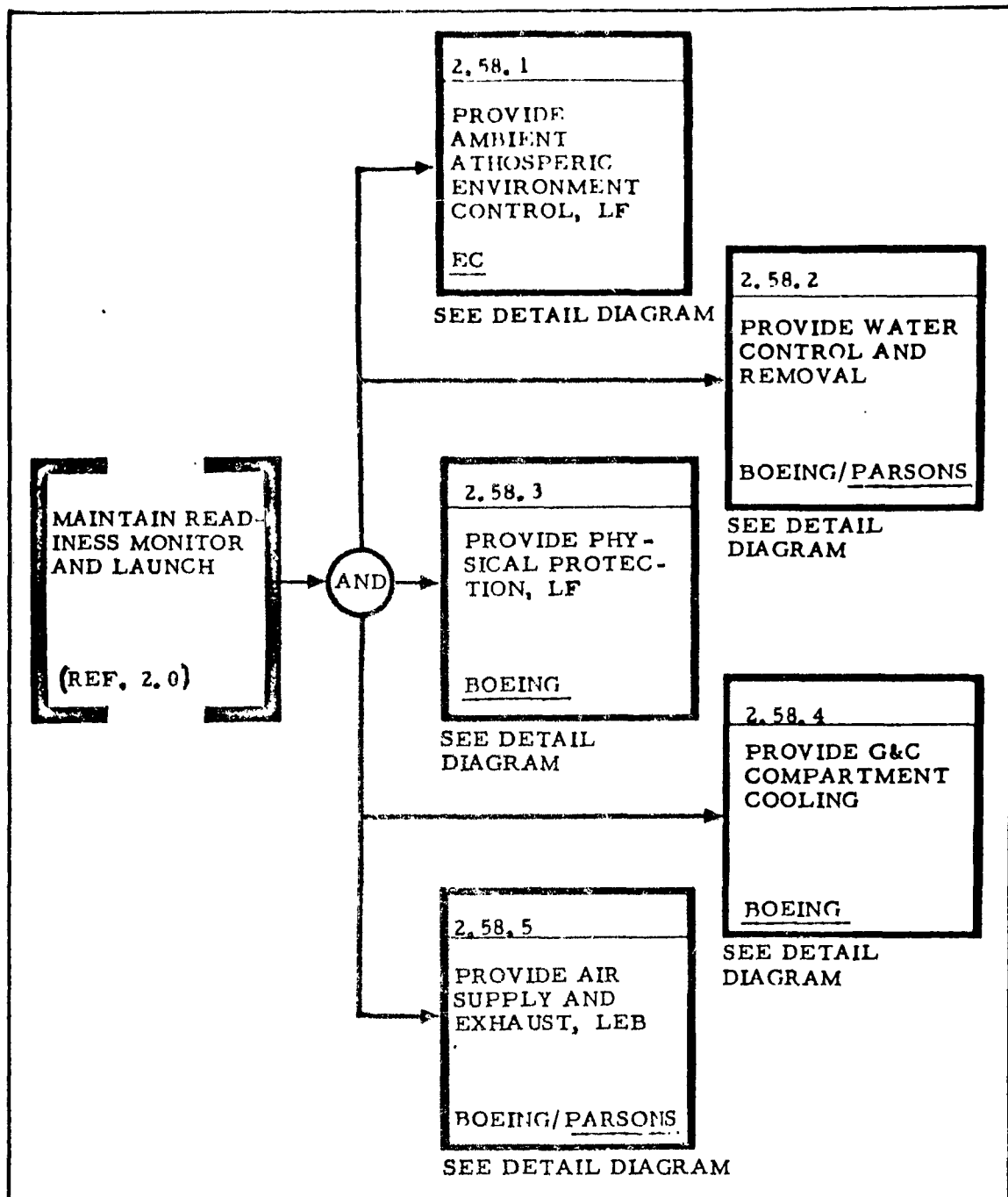
REV SYM C

**BOEING** NO D2-30044-13

SEC. IV PAGE 24

<b>BOEING</b>		DRAWING PREPARED BY		<b>MINUTEMAN WING II</b>	
REVISION	DATE	<b>BOEING</b>		FLUID NAME	
A	12/1/66	AERO-SPACE DIVISION		PROVIDE POWER FUNCTIONAL	
B	1/23/68	DRAWING BY PUPPER		FLOW DRAWING	
		CHECKED BY		2 57 30 INCH 2 57 66	
		PROJECT		SN OF FLOW NO.	





<b>BOEING</b>		DRAWING PREPARED BY:		<b>MINUTEMAN WING VI</b>	
REVISION	DATE	<b>BOEING</b>		FLOW NAME:	
		AERO-SPACE DIVISION		PROVIDE ENVIRONMENT LF	
		WS-133B	DATE		
		DRAWN: J. LUND	4-30-3		
		CHECK: <i>[Signature]</i>	5-7-2		
		GROUP: W. Dempsey	5-7-3		
		PROJECT:		SH OF	FLOW NO. 2.58

REV SYM C

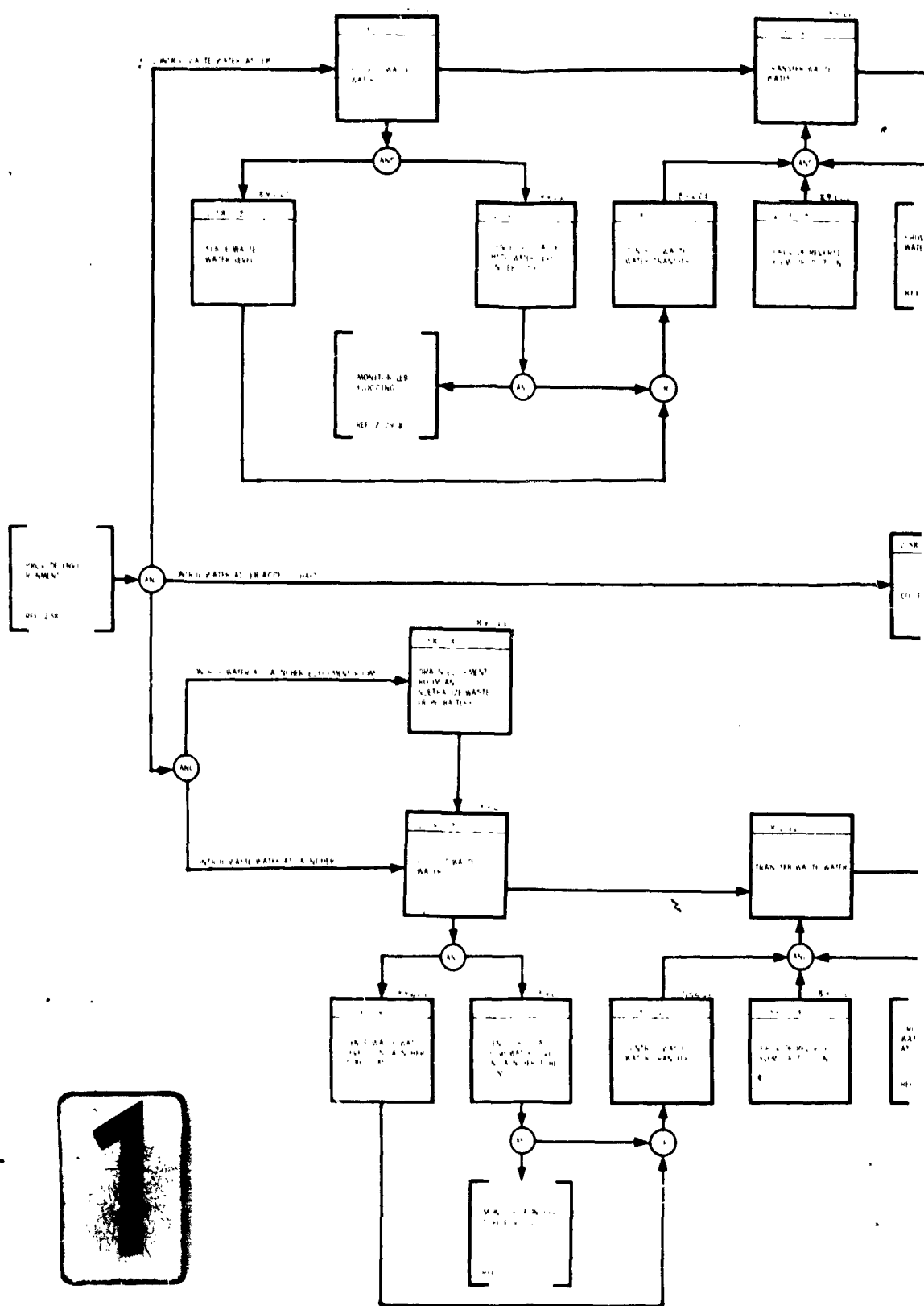
**BOEING**

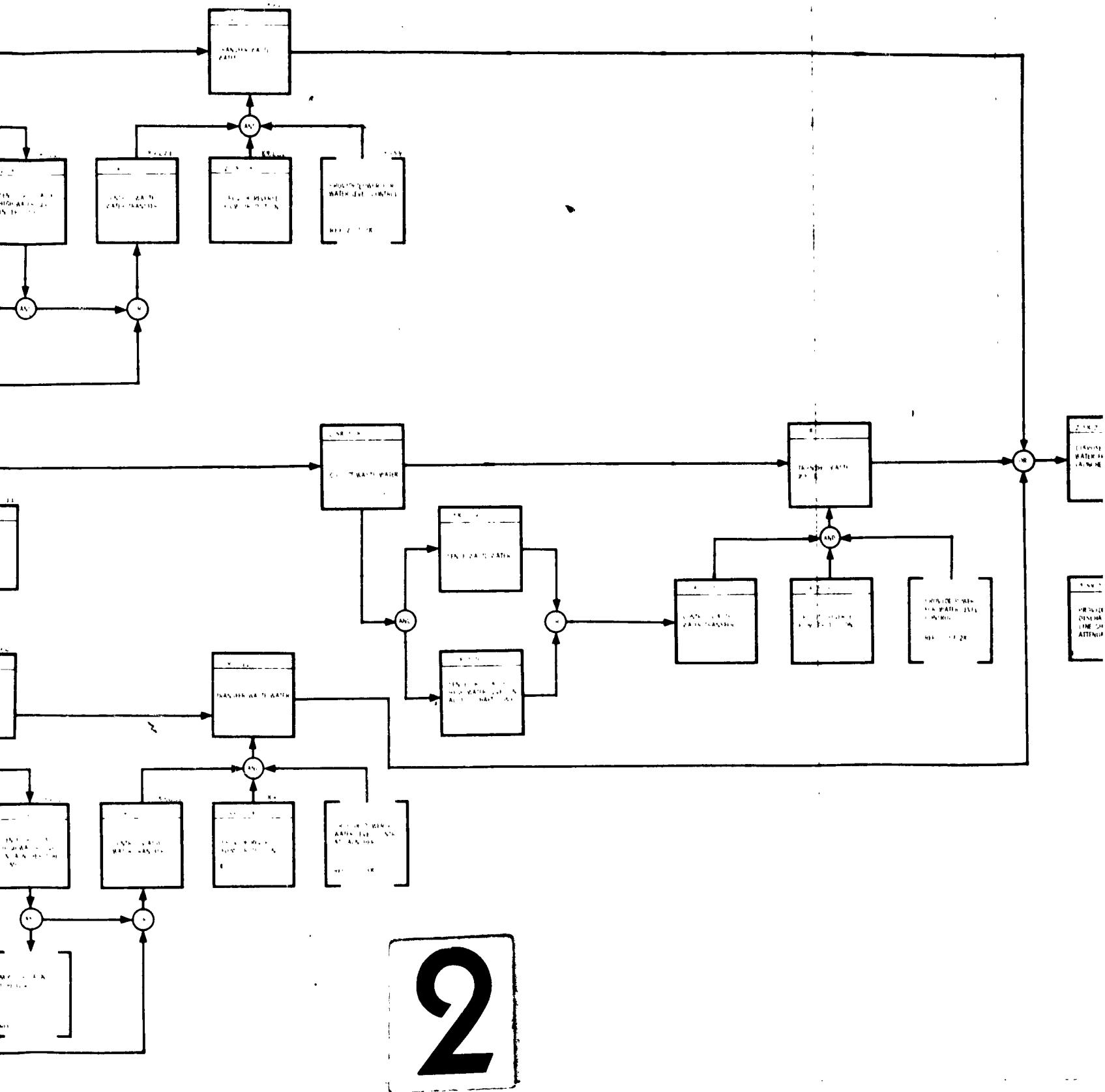
NO D2-30044-1B

SEC IV

PAGE 26









2.5L3  
PROVIDE  
ACCESS  
AND PHYSICAL  
PROTECTION FOR  
HARDENED  
LAUNCHER  
NPE

AND

2.5L3.1  
PROVIDE  
PHYSICAL  
PROTECTION  
FOR LEB  
NPE

AND

2.5L3.2  
PROTECT  
FROM BLAST  
PRESSURE  
EFFECTS  
NPE

2.5L3.5  
PROTECT  
FROM  
SHOCK  
EFFECTS  
NPE, ROHING

AND

2.5L3.9  
PROVIDE ACCESS  
FOR PERSONNEL  
AND EQUIPMENT  
TO LEB  
NPE

2.5L3.3  
PROVIDE  
BLAST PROTECTION  
FOR VENTILATION  
AIR OPENINGS  
ROHING

2.5L3.8  
PROVIDE  
BLAST  
PROTECTION  
FOR HARDENED  
LEB ENTRY  
NPE

AND

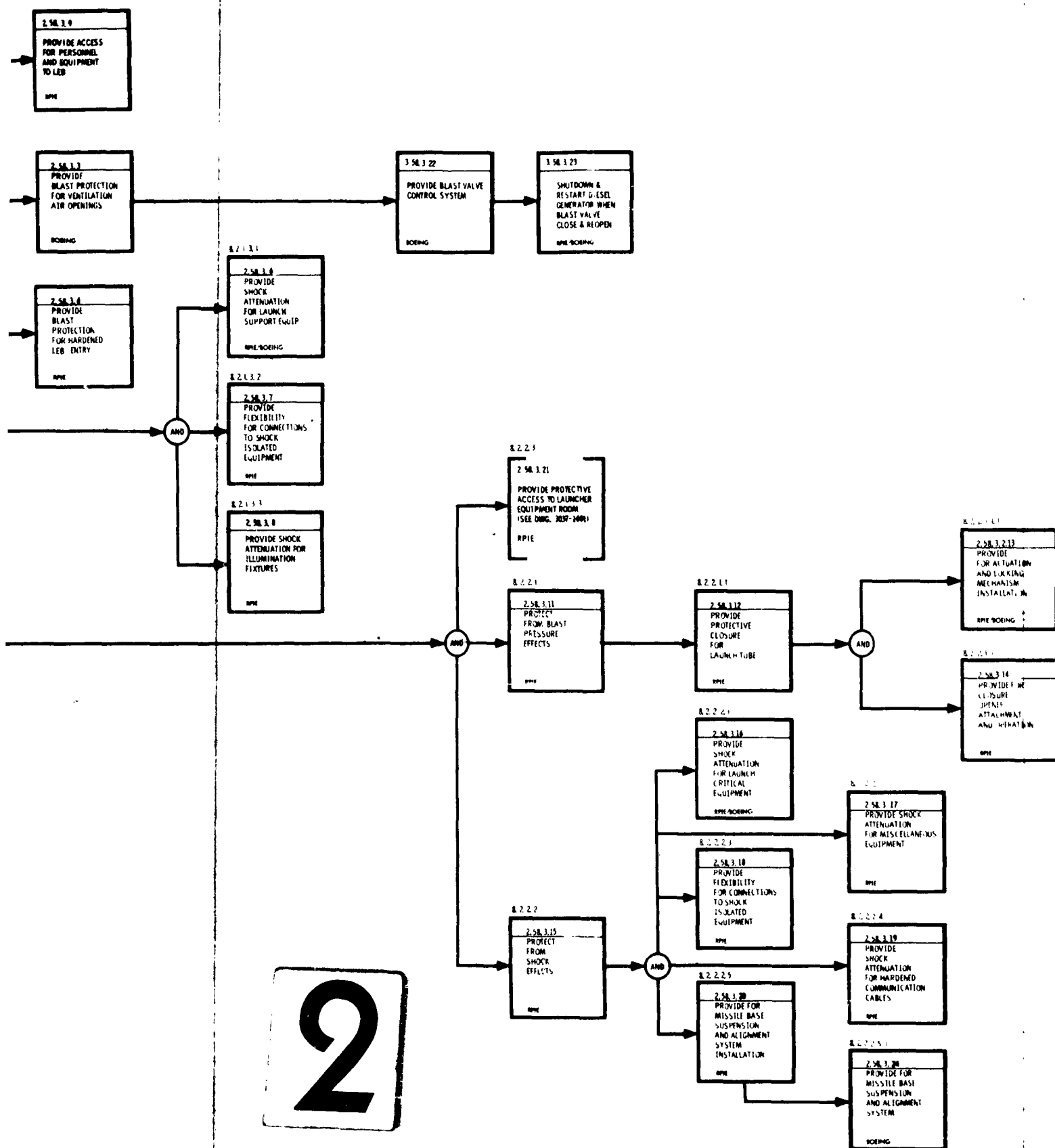
2.5L3.6  
PROVIDE  
SHOCK  
ATTENUATION  
FOR LAUNCH  
SUPPORT EQUIP  
NPE, ROHING

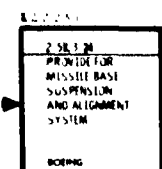
2.5L3.7  
PROVIDE  
FLEXIBILITY  
FOR CONNECTIONS  
TO SHOCK  
ISOLATED  
EQUIPMENT  
NPE

2.5L3.8  
PROVIDE SHOCK  
ATTENUATION FOR  
ILLUMINATION  
FIXTURES  
NPE

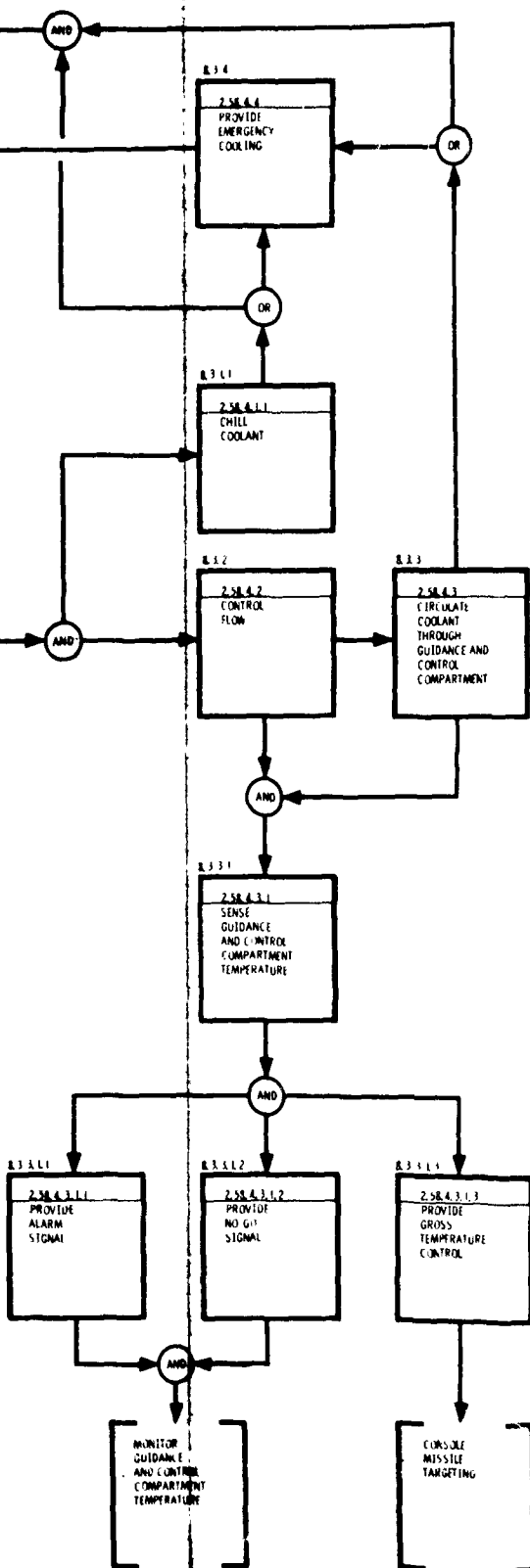
1

2





4



NOTE  
FUNCTION NUMBERS ABOVE THE FUNCTION  
BOXES ARE FROM

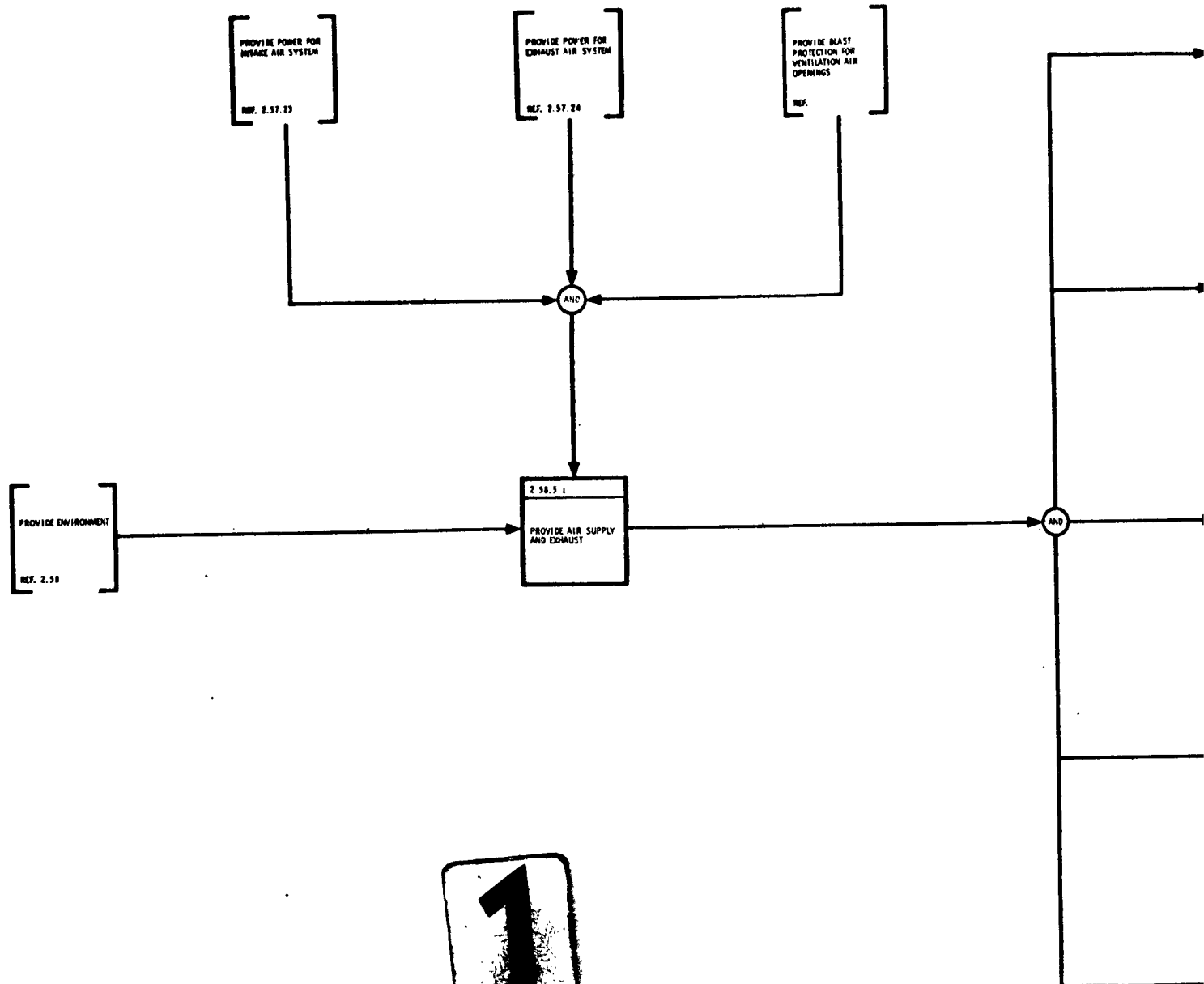
- (1) WING 1 DWG 25-18771 SH IS  
FOR 2, 3 & 4 FLOW
- (2) WING 111 DWG 25-33500 SH IS  
FOR 2, 3 & 3 FLOW

REV SYM C

**BOEING** | NO D2-30044-1B

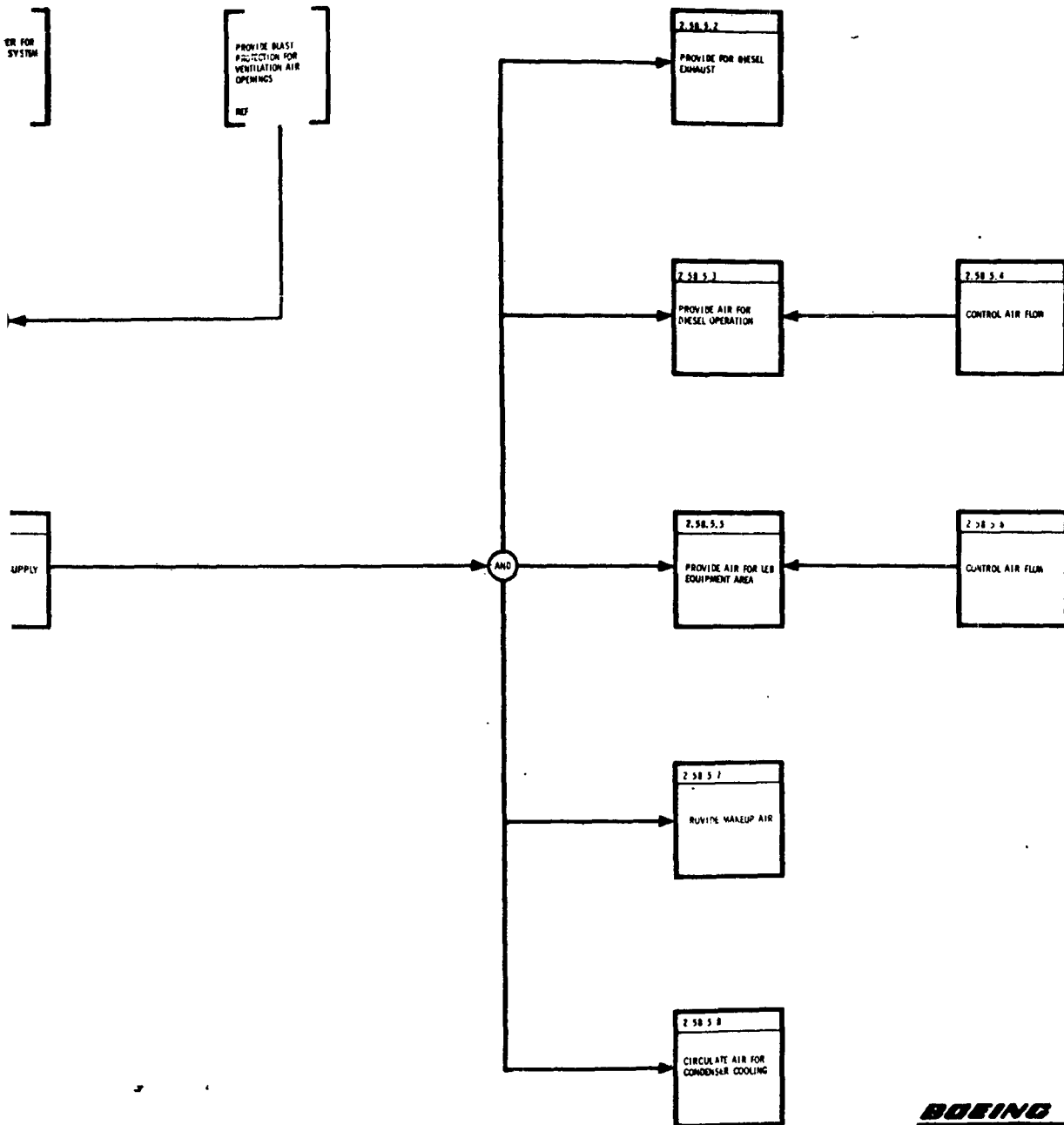
SEC. IV | PAGE 28

<b>DOING</b>		DRAWING PREPARED BY:		<b>HINUTAMAN WING XI</b>	
REVISION	DATE	<b>DOING</b>		FLOW NAME: 1. NO. 3	
		AERO-SPACE DIVISION		PROVIDE ACCESS AND PHYSICAL PROTECTION FOR HANDLED	
				LAWRENCE	
				2. NO. 4 PROVIDE GAC	
				COMPARTMENT COLLING	
				SH OF FLOW NO. 2. NO. 3. 4	



1





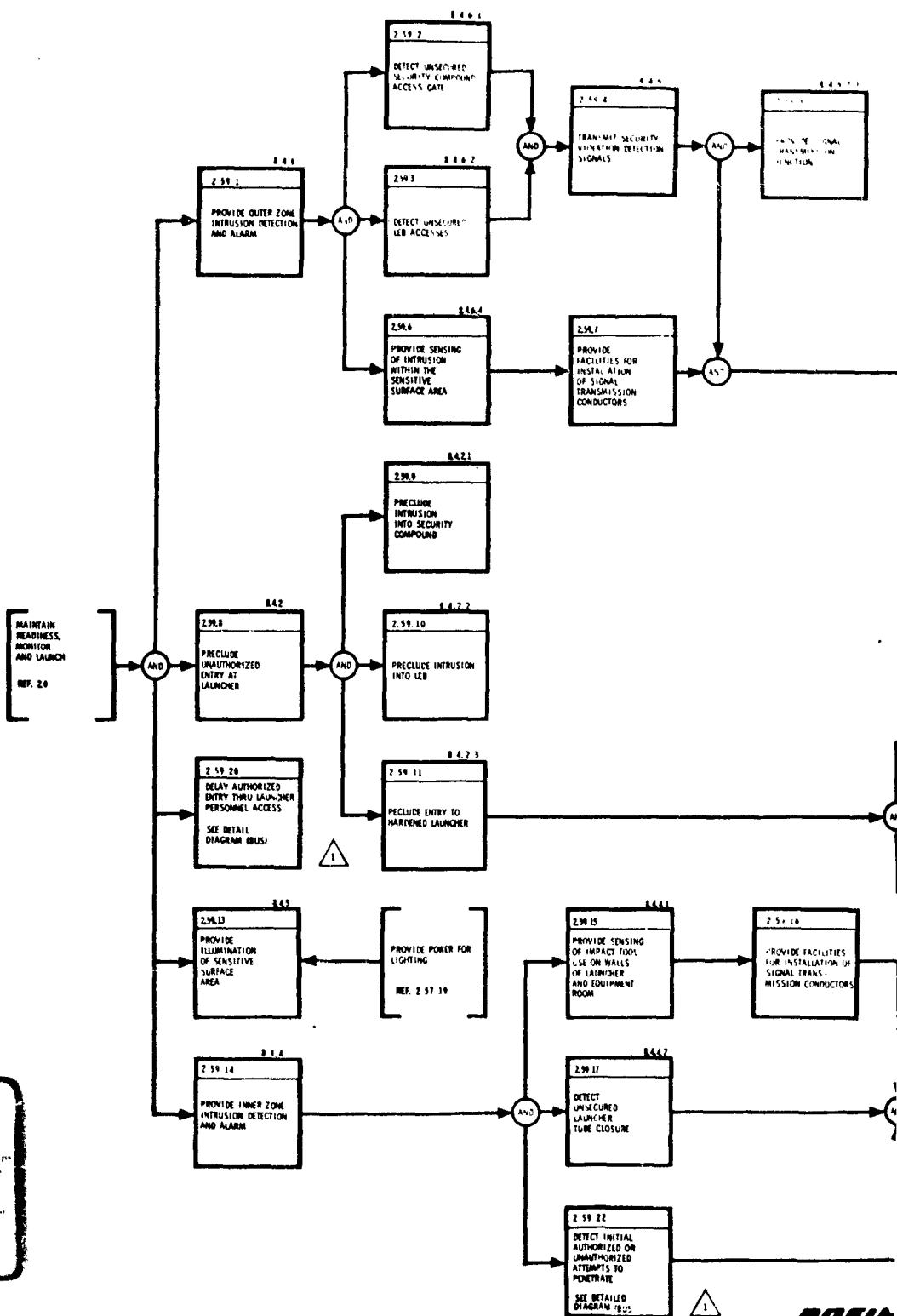
2

**BOEING** NO D2-30044-1B  
SEC. IV PAGE 29

REV SYM C

BOEING		DRAWING PREPARED BY:	MINUTEMAN WING XI
REVISION	DATE	THE RALPH M. PARSONS CO.	FLOW NAME
		617 W. 7TH STREET	PROVIDE AIR SUPPLY
		LOS ANGELES 17, CALIFORNIA	AND EXHAUST, IEB
		11 APRIL 1963	SH (OF 1) (FLOW NO. 12-56)

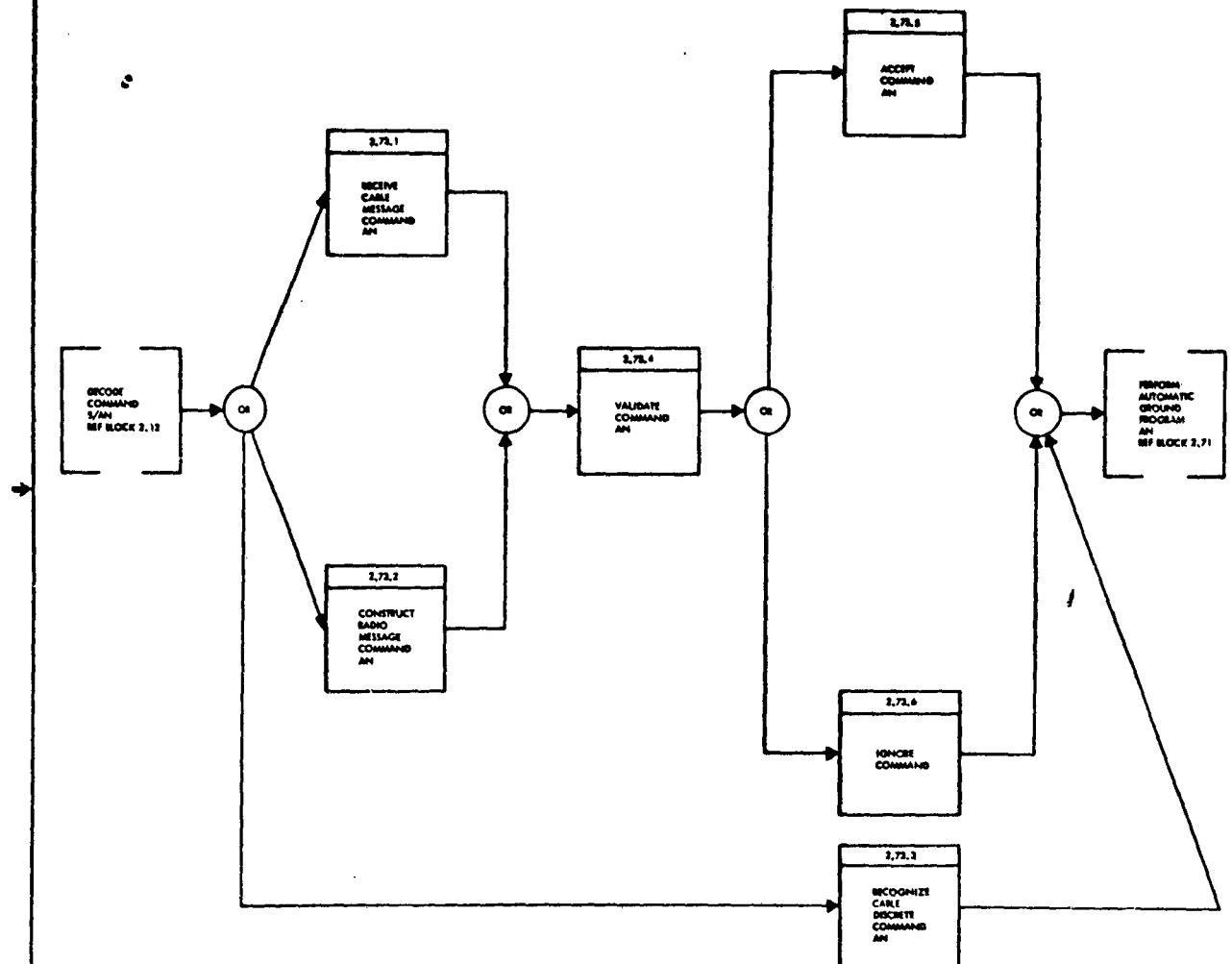
THE SIGNAL TRANSMISSION FUNCTIONS  
FUNCTIONS 2.59.5 AND 2.59.10  
SHALL FACILITATE INDEPENDENT TESTING  
OF INNER AND OUTER ZONES





REV SYM C

DETAIL SECOND LEVEL FLOW  
(BLOCK 273 PERFORM MESSAGE)  
RECOGNITION



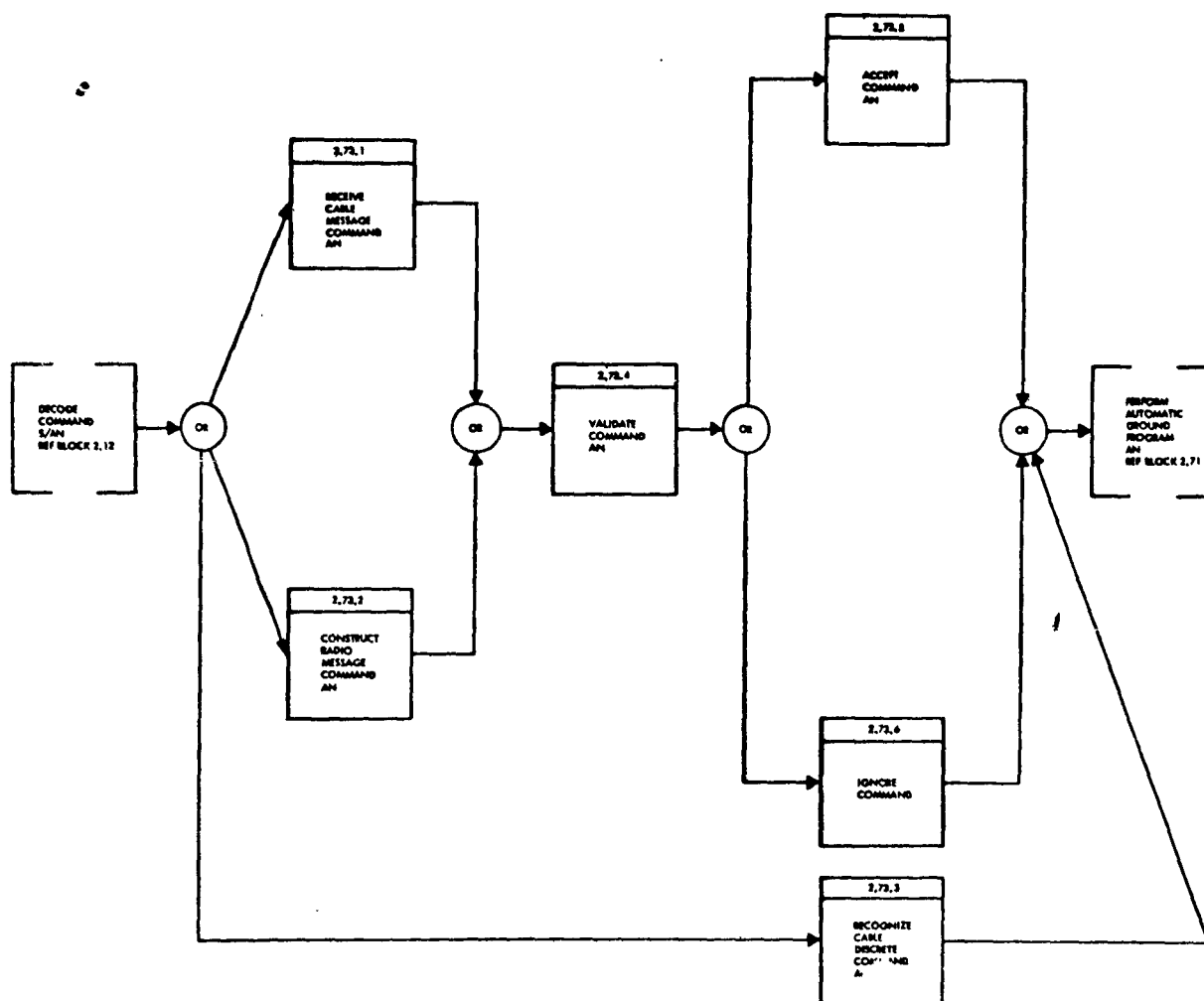
1

REV SYM C

BOEING NO  
SEC.

BOEING		DRAWING PR
REVISION	DATE	

DETAIL SECOND LEVEL FLOW  
(BLOCK 273 PERFORM MESSAGE)  
RECOGNITION



REV SYM C

**BOEING**

NO D2-30044-1B

SEC.

IV

PAGE

31

**BOEING**

DRAWING PREPARED BY:

MINUTEMAN WING VI

REVISION DATE



FLOW NAME:

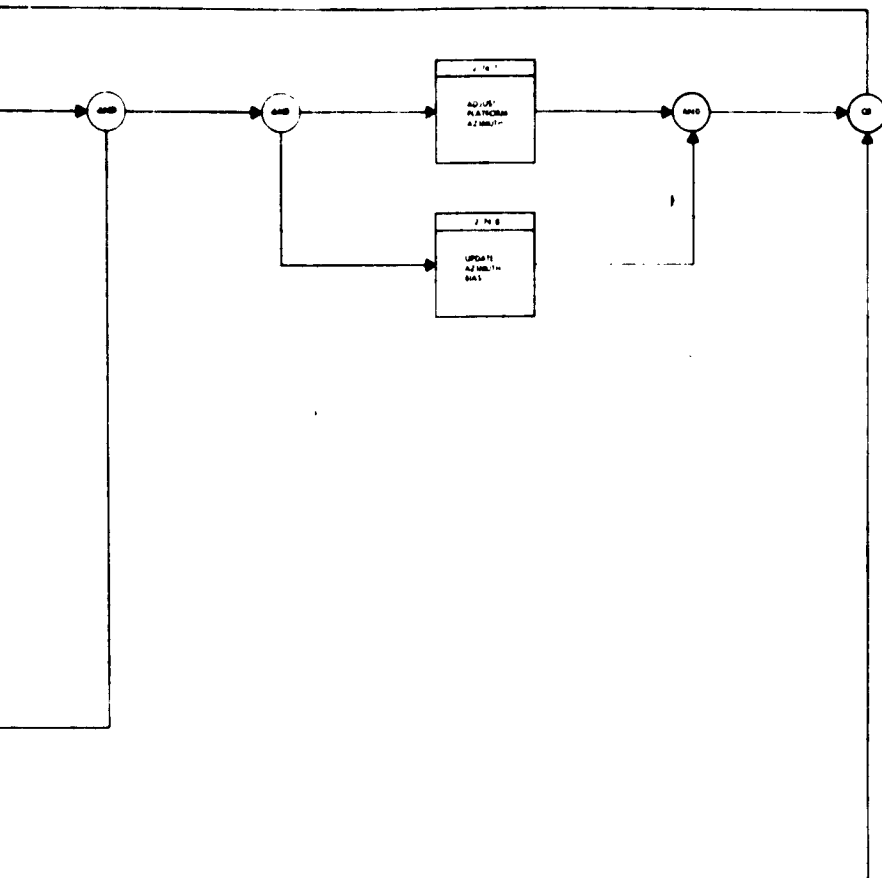
BLOCK 273  
PERFORM MESSAGE  
RECOGNITION

SHEET OF

FLOW NO.







**3**

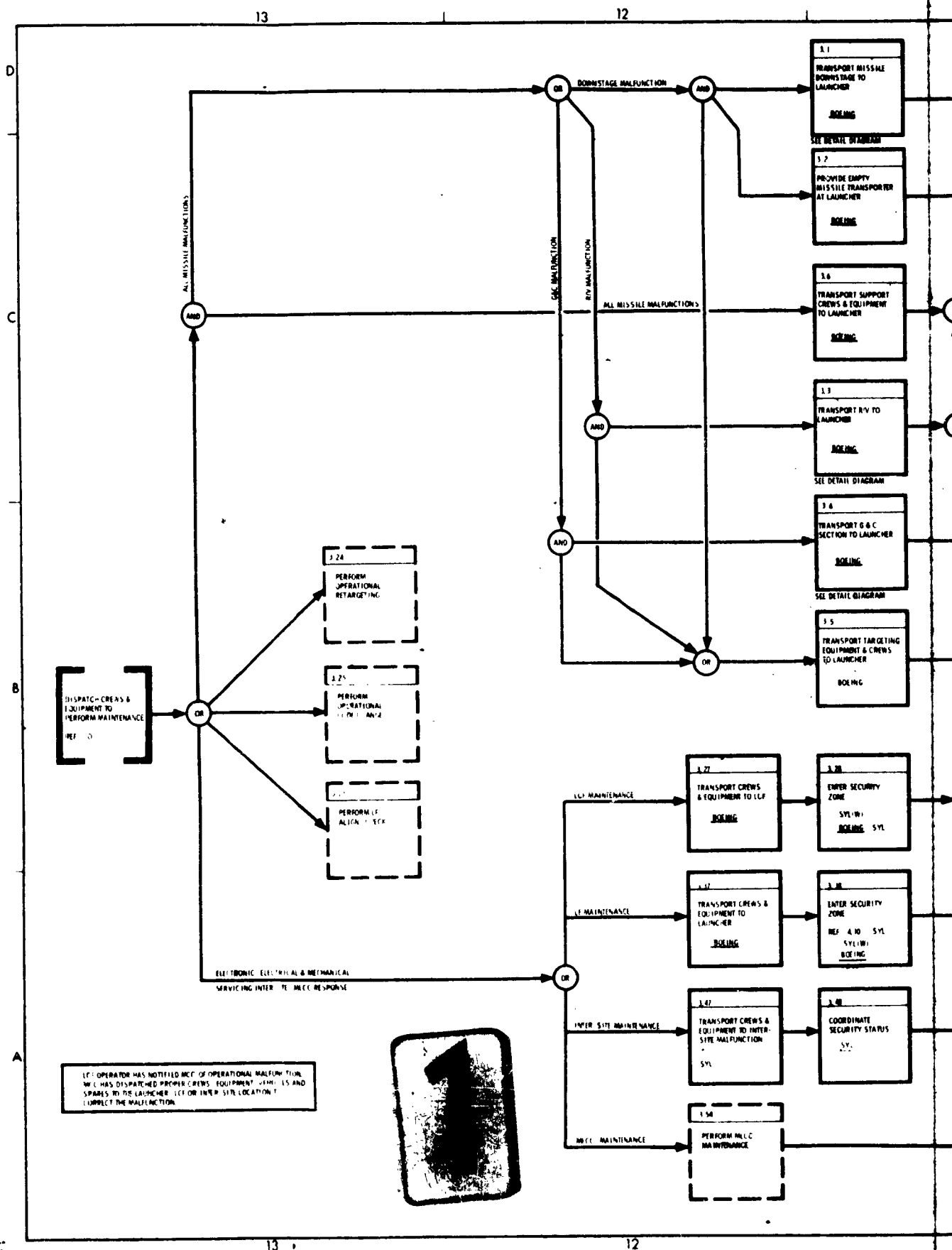
BLOCK 274  
PROVIDE ALIGNMENT CAPABILITIES

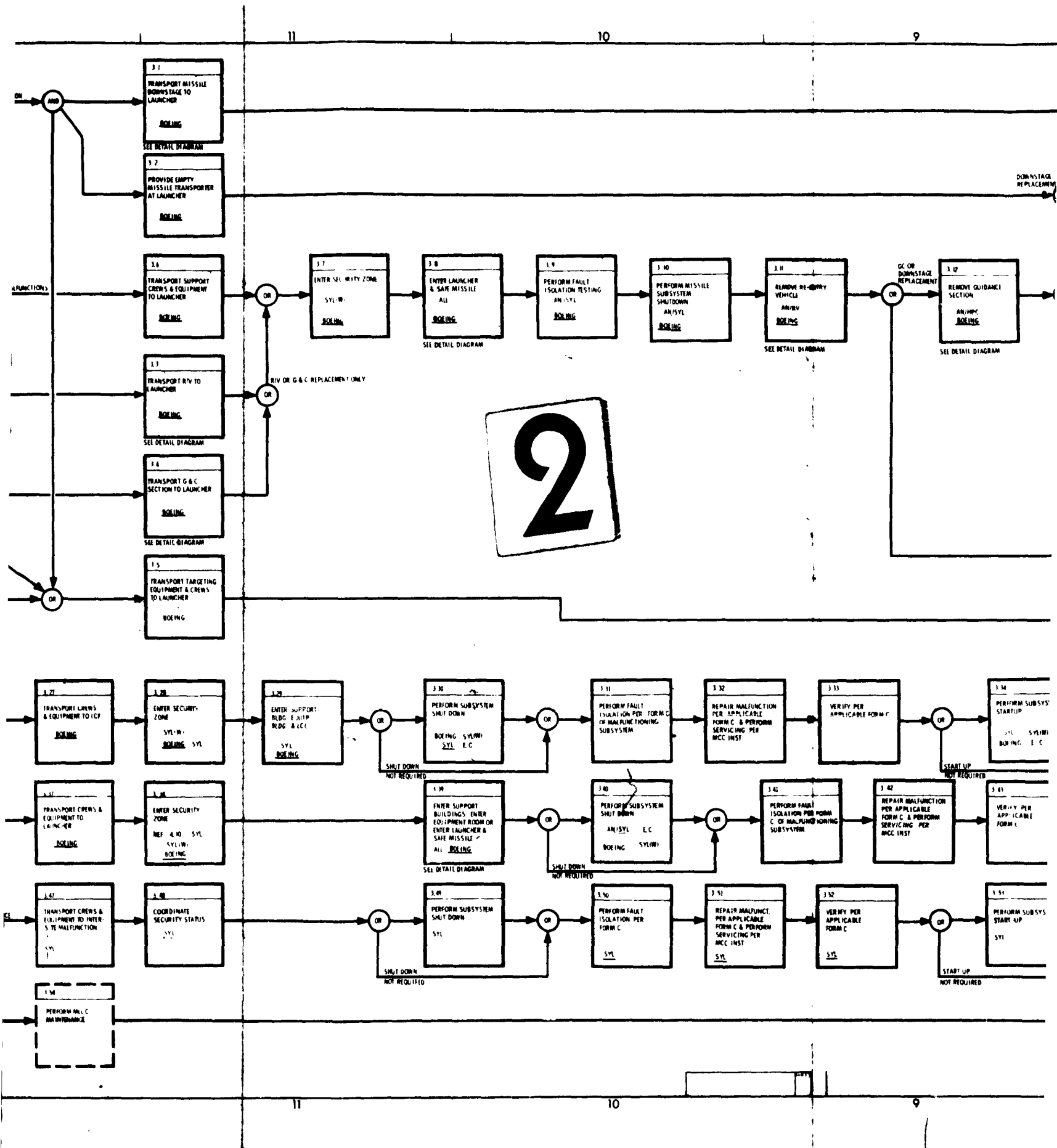
**SEMS** | NOD2-30044-1B  
| SEC IV | PAGE 32

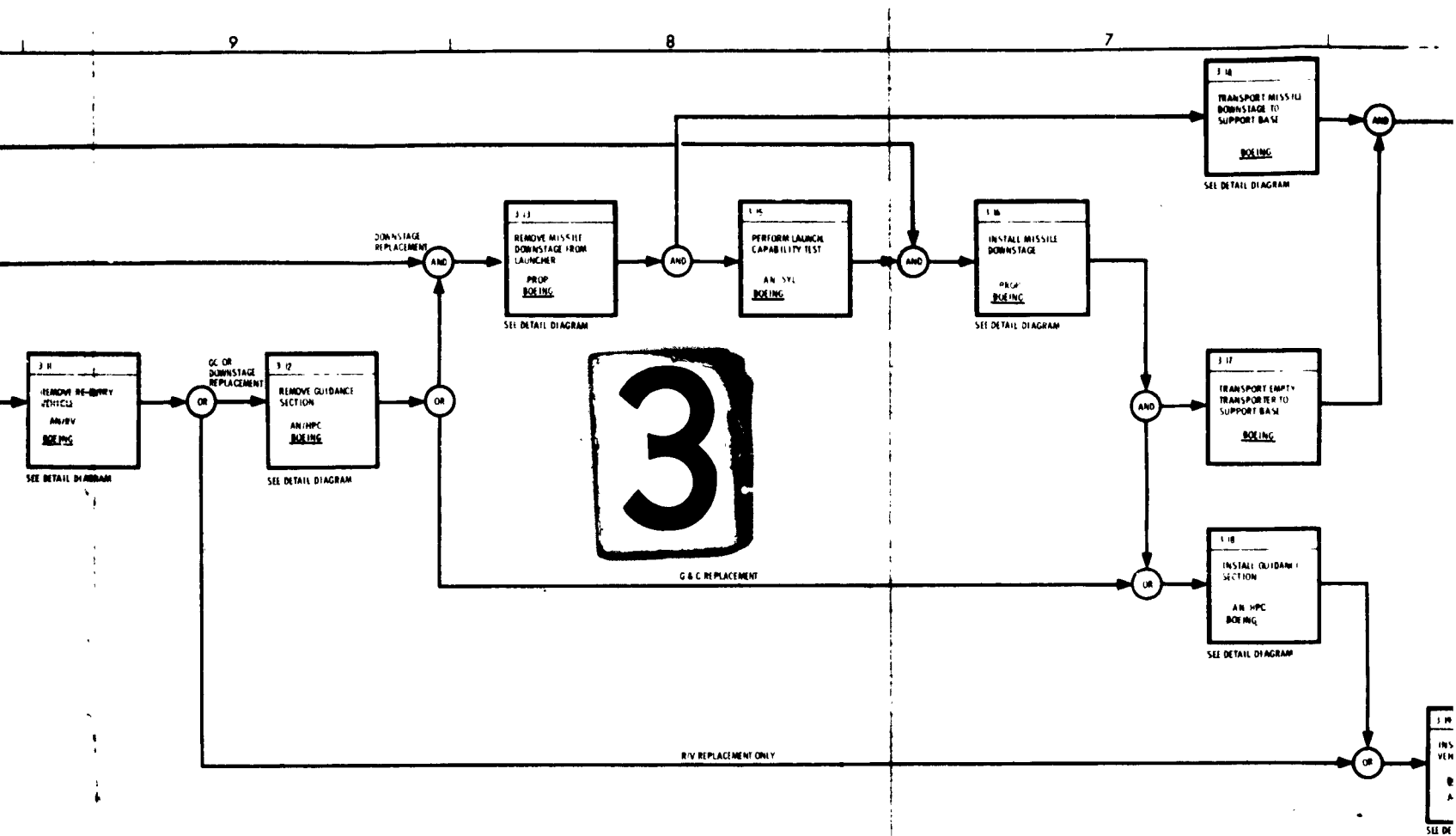
REV SYM C

<b>SEMS</b>		DRAWING PREPARED BY	MINUTEMAN WING 32
TYPE	DATE		BLOCK 274 PROVIDE ALIGNMENT CAPABILITIES
SHEET OF		FLOW NO	

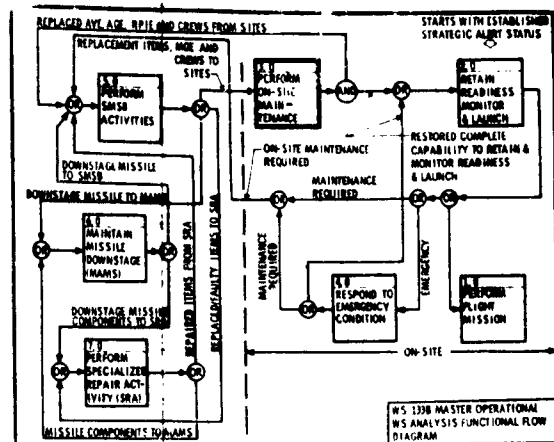
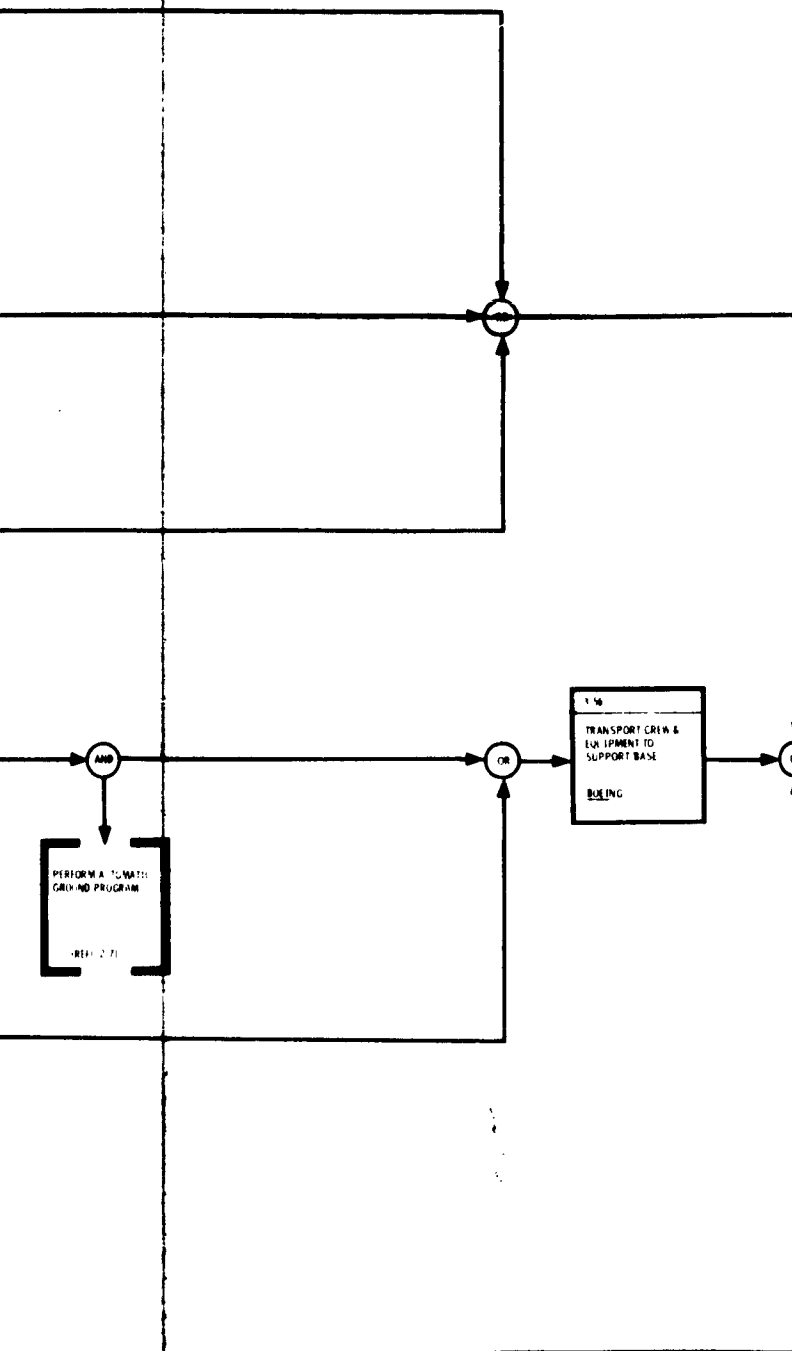












#### NOTES

● ABBREVIATIONS USED ON THIS DRAWING ARE AS FOLLOWS:

GIC GUIDANCE AND CONTROL  
 LCF LAUNCH CONTROL FACILITY  
 MCC MAINTENANCE CONTROL CENTER  
 MLCC MOBILE LAUNCH CONTROL CENTER  
 RV RE-ENTRY VEHICLE  
 BOWING THE BOWING COMPANY  
 SYL SYLVANIA  
 SYLW SYLVANIA (WEST)  
 AN AUTONAUTICS  
 P PROPULSION  
 HPC HERCULES POWDER CO. MAGNAN, UTAH

● PRIME RESPONSIBILITY FOR COLLECTION OF ANALYSIS DATA FOR A FUNCTION IS DENOTED BY UNDERLINING OF ASSOCIATE CONTRACTOR

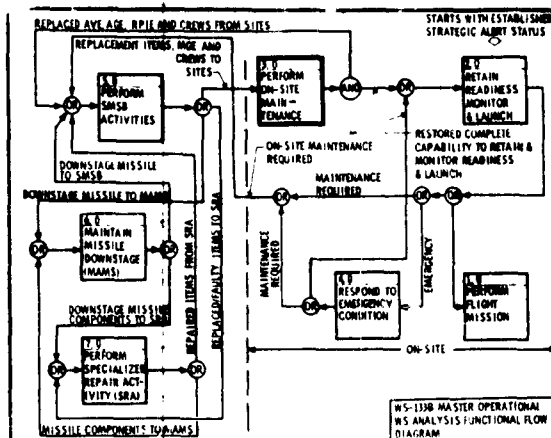
MAJUNCTION HAS BEEN CORRECTED AND STRATEGIC ALERT STATUS HAS BEEN ESTABLISHED. CREWS HAVE SECURED THE FACILITY AND HAVE RETURNED THE EQUIPMENT VEHICLES AND MAJUNCTIONED COMPONENTS TO THE SHSB, WHERE THE FAULTY EQUIPMENT WILL BE REPAIRED OR PREPARED FOR OTHER DISPOSITION.

5

REV SYM C

NO D2-30044-1B  
 SEC IV PAGE 33

DRAWING PREPARED BY			
BOEING	DATE	BY	DATE
10/1/68	10/1/68	10/1/68	10/1/68
10/1/68	10/1/68	10/1/68	10/1/68
10/1/68	10/1/68	10/1/68	10/1/68
10/1/68	10/1/68	10/1/68	10/1/68



3.56  
TRANSPORT CREW &  
EQUIPMENT TO  
SUPPORT BAY  
BOXING

REPAIR WITH  
COMPONENTS OR  
PREPARE FOR  
OTHER DISPOSITION  
PER FORM  
REV. 5.1

#### NOTES

• ABBREVIATIONS USED ON THIS  
DRAWING ARE AS FOLLOWS:

G/C GUIDANCE AND CONTROL  
LCF LAUNCH CONTROL FACILITY  
MCC MAINTENANCE CONTROL CENTER  
MLCC MOBILE LAUNCH CONTROL CENTER  
R/V RE-ENTRY VEHICLE  
BREFC THE BOEING COMPANY  
SYL SYLVANIA  
S-FLMT SYLVANIA/FIRST  
AN AUTORETICS  
PROM PROPULSION  
HPC MERCURUS POWDER CO. MAGNA, UTAH

• PRIME RESPONSIBILITY FOR COLATION  
OF ANALYSIS DATA FOR A FUNCTION  
IS DENOTED BY UNDERLINING OF  
ASSOCIATE CONTRACTOR

MAJUNCTION HAS BEEN CORRECTED AND STRATEGIC ALERT STATUS  
HAS BEEN ESTABLISHED. CREWS HAVE SECURED THE FACILITY AND HAVE  
RETURNED THE EQUIPMENT, VEHICLES AND MAJUNCTIONED COMPONENTS TO  
THE SWSB, WHERE THE FAULTY EQUIPMENT WILL BE REPAIRED OR  
PREPARED FOR OTHER DISPOSITION.

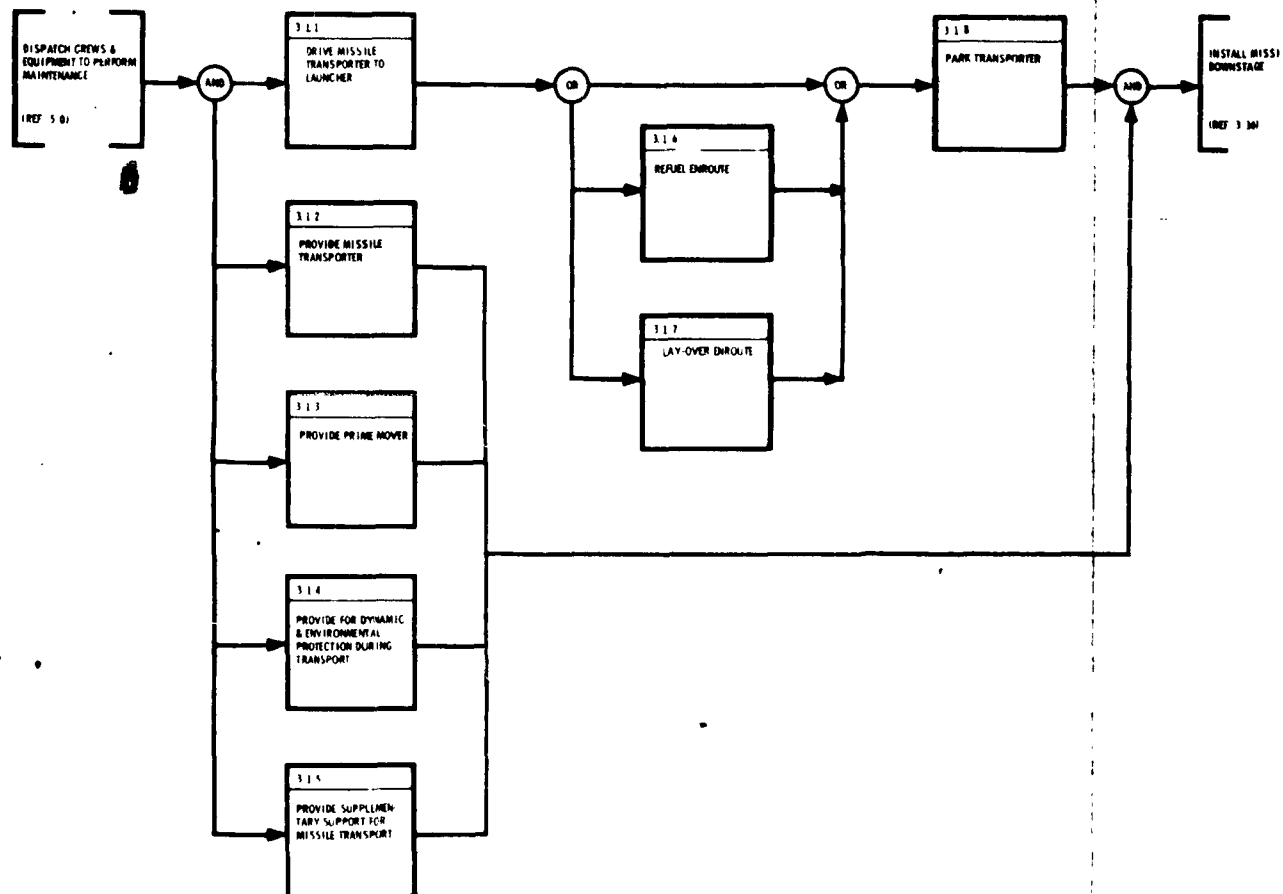
REV SYM C

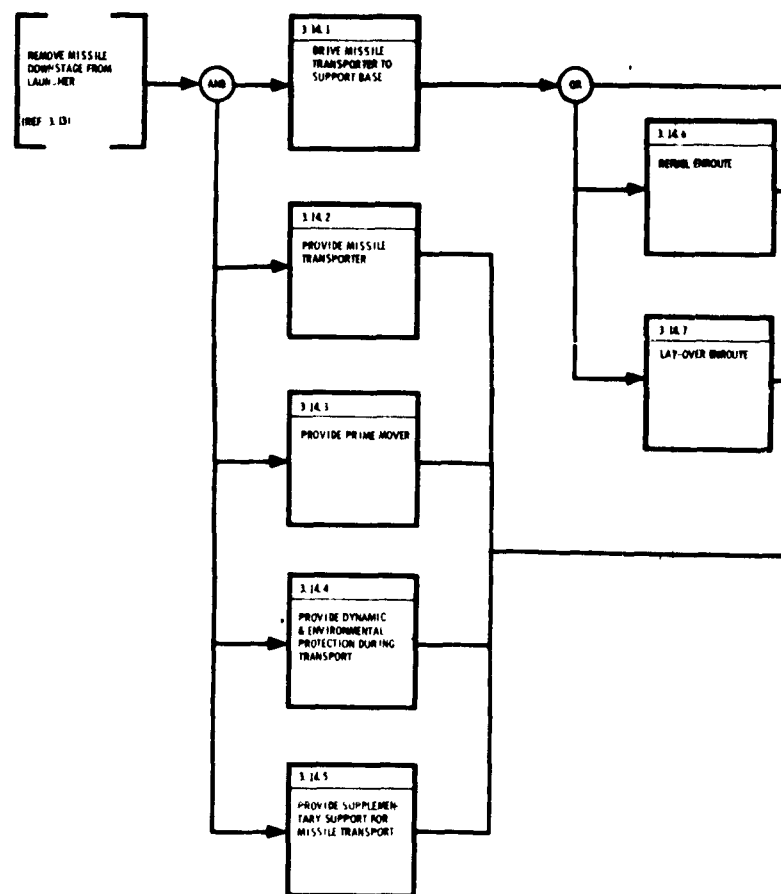
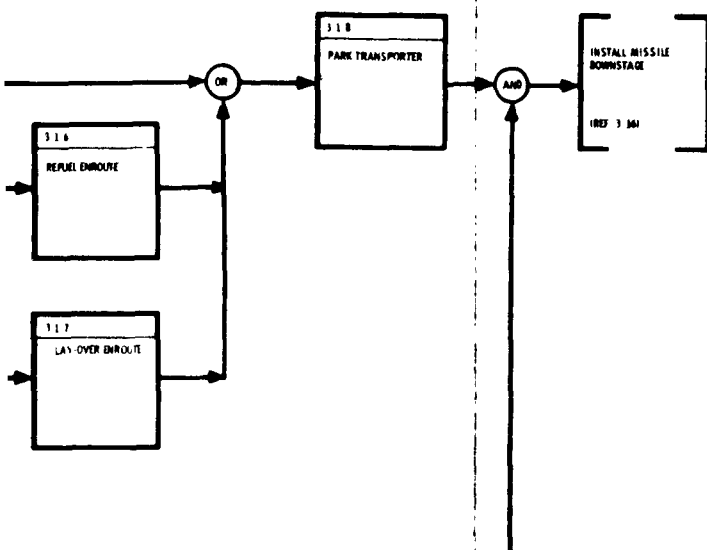
BOEING NO D2-30044-1B

SEC IV

PAGE 33

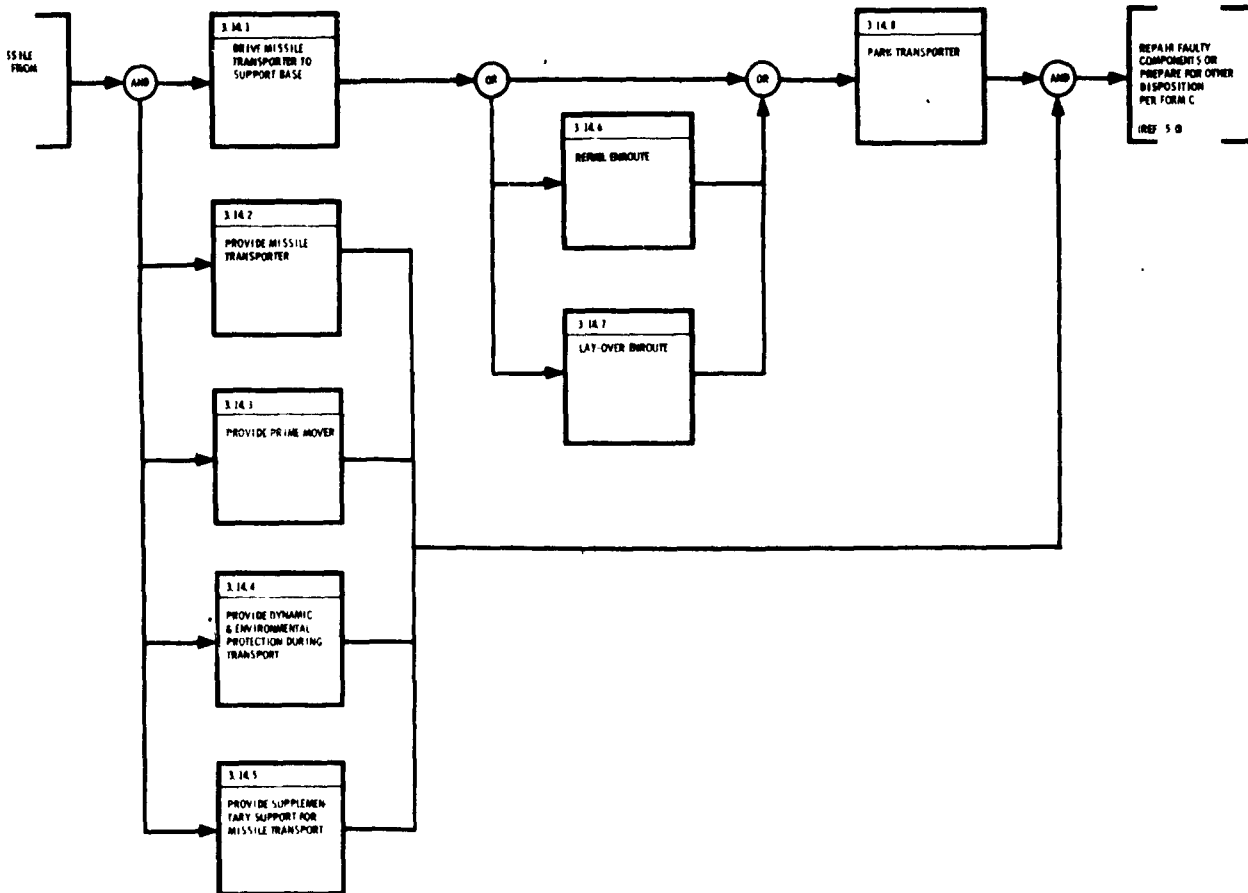
BOEING		DRAWING PREPARED BY		MINUTEMAN WING 32	
REVISION	DATE	BOEING		FLOW NAME	
1	1/1/78	AND SPACE DIVISION		PERFORM ON SITE	
2	1/1/78	P. 1		MAINTENANCE	
3	1/1/78	P. 2		ON OF FLOW NO. 3.0	
4	1/1/78	P. 3			
5	1/1/78	P. 4			
6	1/1/78	P. 5			
7	1/1/78	P. 6			
8	1/1/78	P. 7			
9	1/1/78	P. 8			
10	1/1/78	P. 9			





2





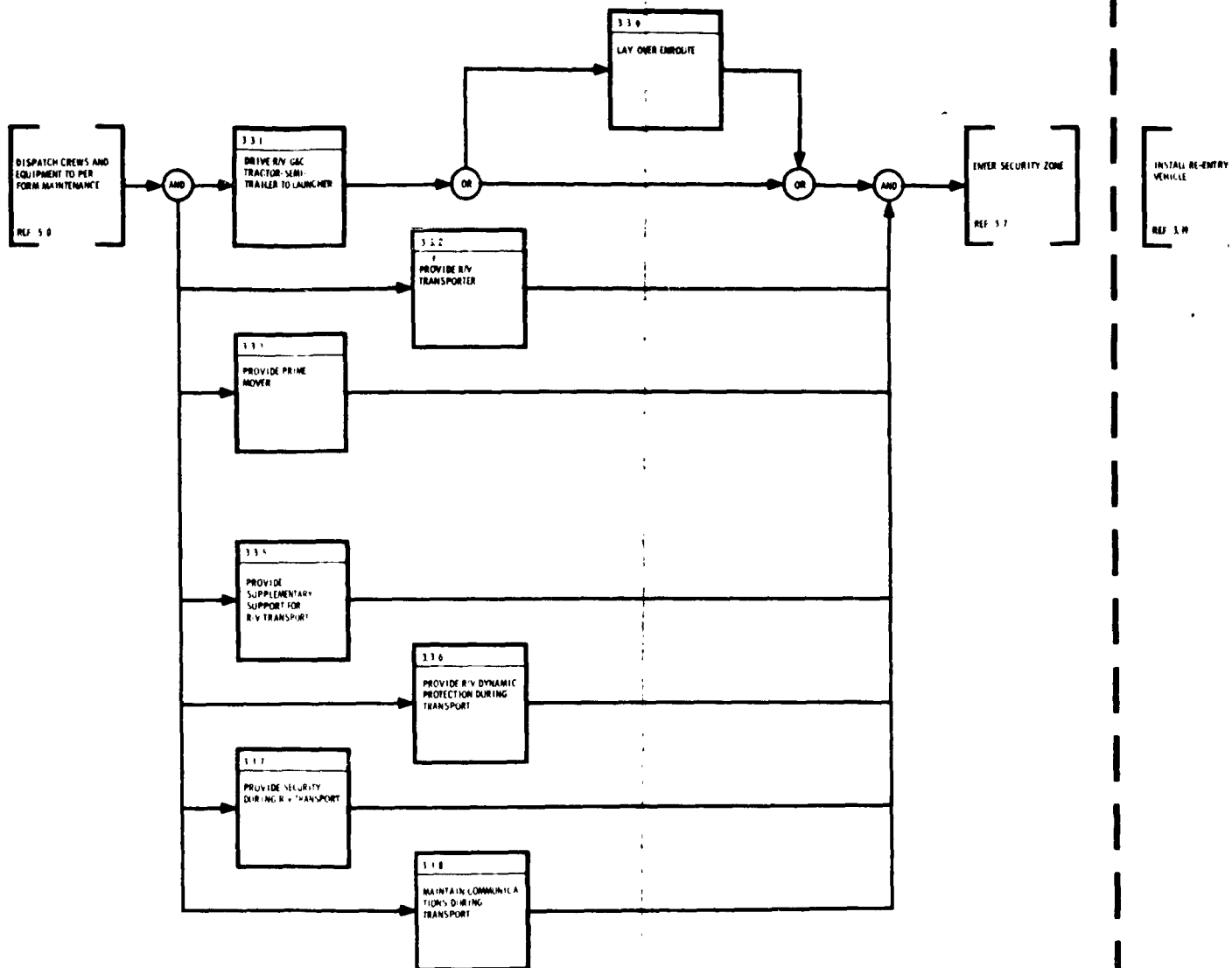
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REV SYM C

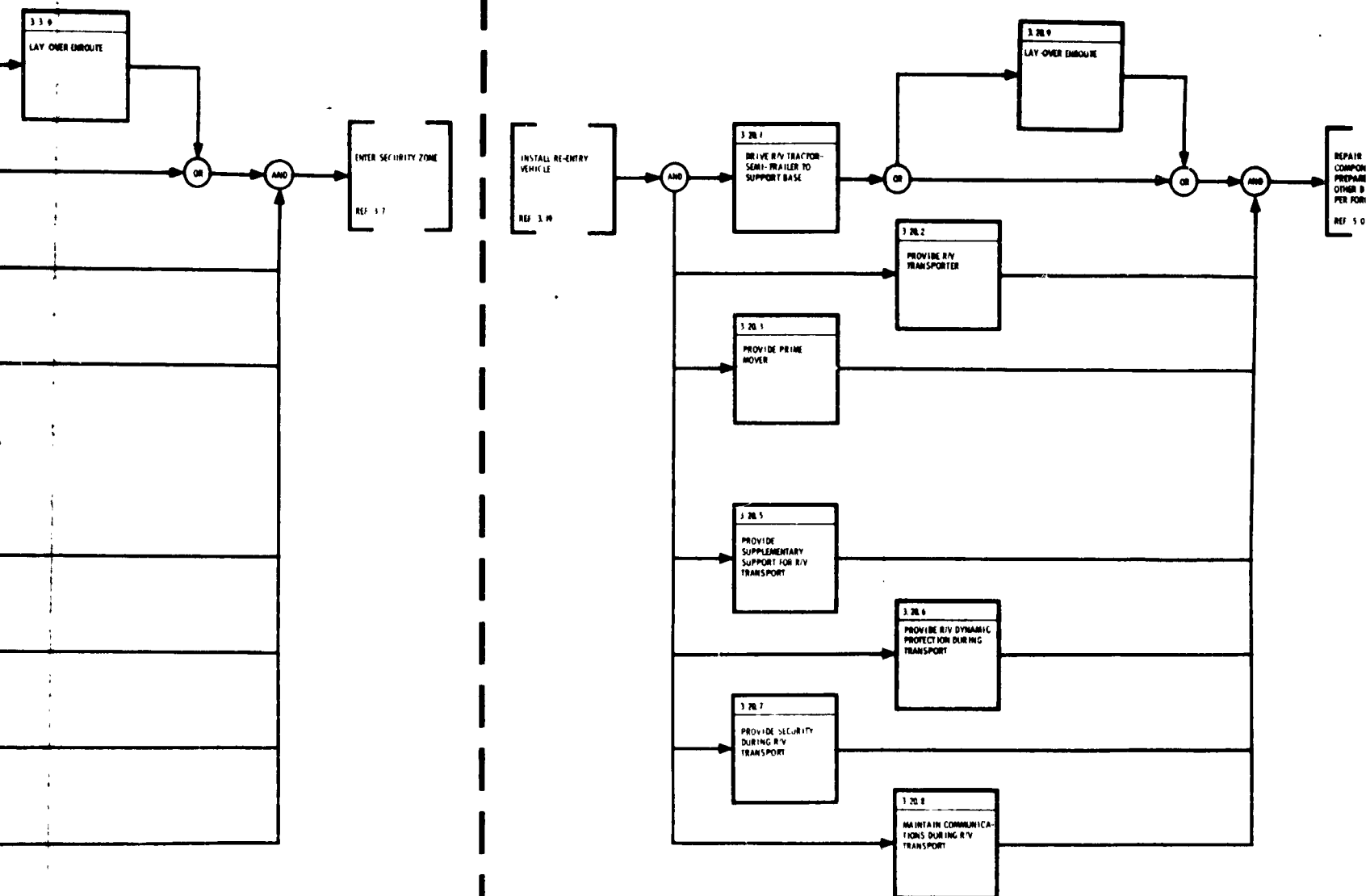
BOEING NO D2-30044-1B3

SEC IV PAGE 34

<b>BOEING</b>		DRAWING PREPARED BY		<b>MINUTEMAN WING XI</b>	
REVISION	DATE	<b>BOEING</b>		FLOW NAME	
		AERO-SPACE DIVISION		TRANSPORT MISSILE DOWNS EDGE	
			REV	NO LAUNCHES (3.1)	
				TRANSPORT MISSILE DOWNS EDGE	
			BY	IN SUPPORT BASE (3.1)	
			DATE	SH OF FLOW NO. 31.8.3.4	



1

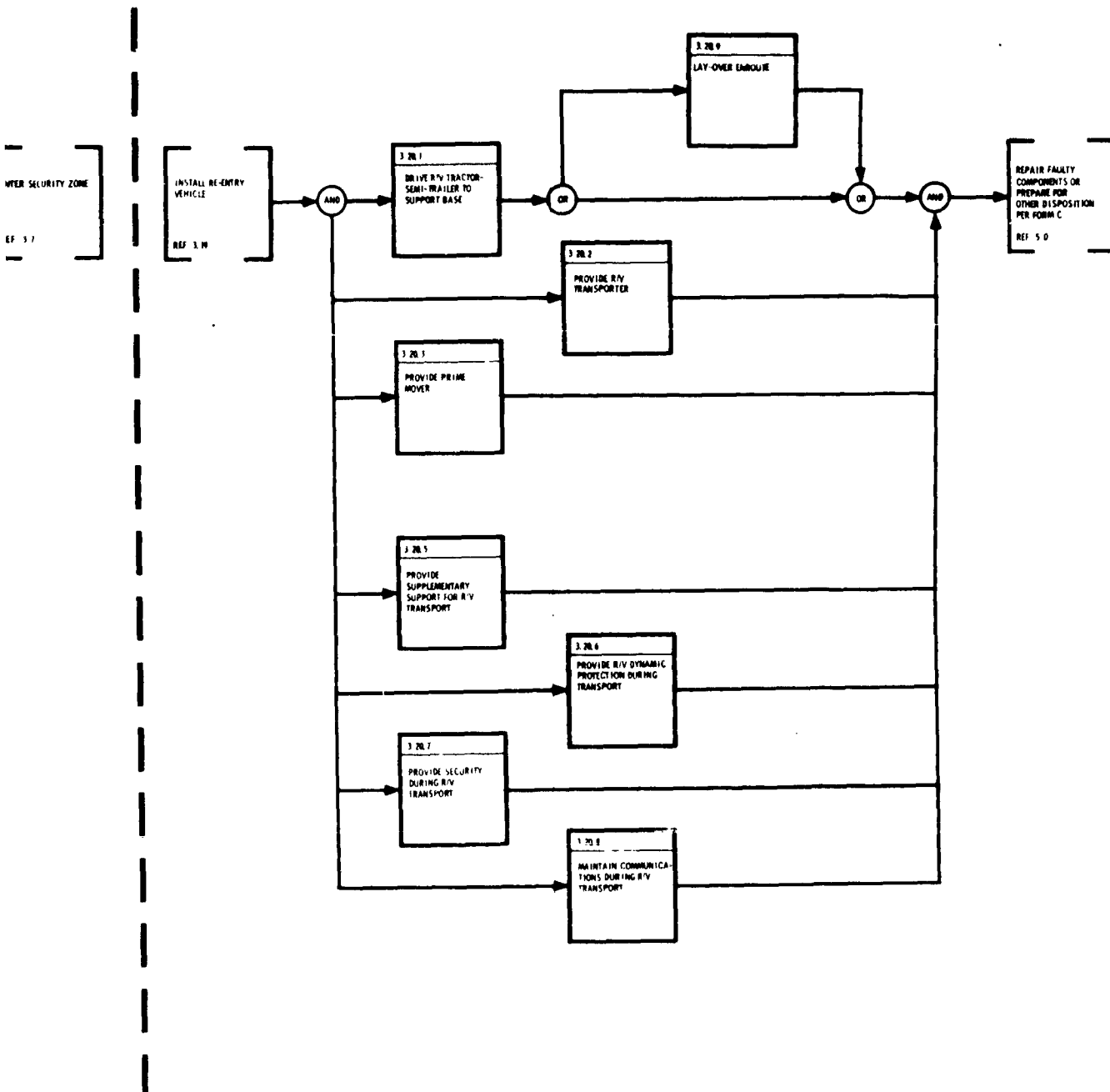


2

REV SYM \_C\_

**BOEING**

REV	SYN	DATE



3

REV SYM C

**BOEING**

NO D2-30044-1B

SEC. IV

PAGE 35

BOEING		DRAWING PREPARED BY		MINUTEMAN WING XI	
REVISION	DATE	BOEING	ALDO SPACKER	FLOW NAME	TRANSPORT R/V TO LAUNCHER 15
			DAW	AND	TRANSPORT R/V TO SUPPORT BASE
		DRAWING		1.20	
		CHECK			
		APPROVE			
		PROJECT			
				SH OR	FLOW NO. 3.20.3.20

DISPATCH CREWS AND  
EQUIPMENT TO PER-  
FORM MAINTENANCE?  
REF 3.0

AND

3.4.1  
DRIVE GAC  
TRANSPORTER TO  
LAUNCHER

OR

3.4.8  
LAY-OVER ENROUTE

OR

3.4.2  
PROVIDE GAC  
TRANSPORT

AND

ENTER SECURITY ZONE  
REF 3.7

INSTALL  
RE-ENTRY  
VEHICLE  
REF 3.9

AND

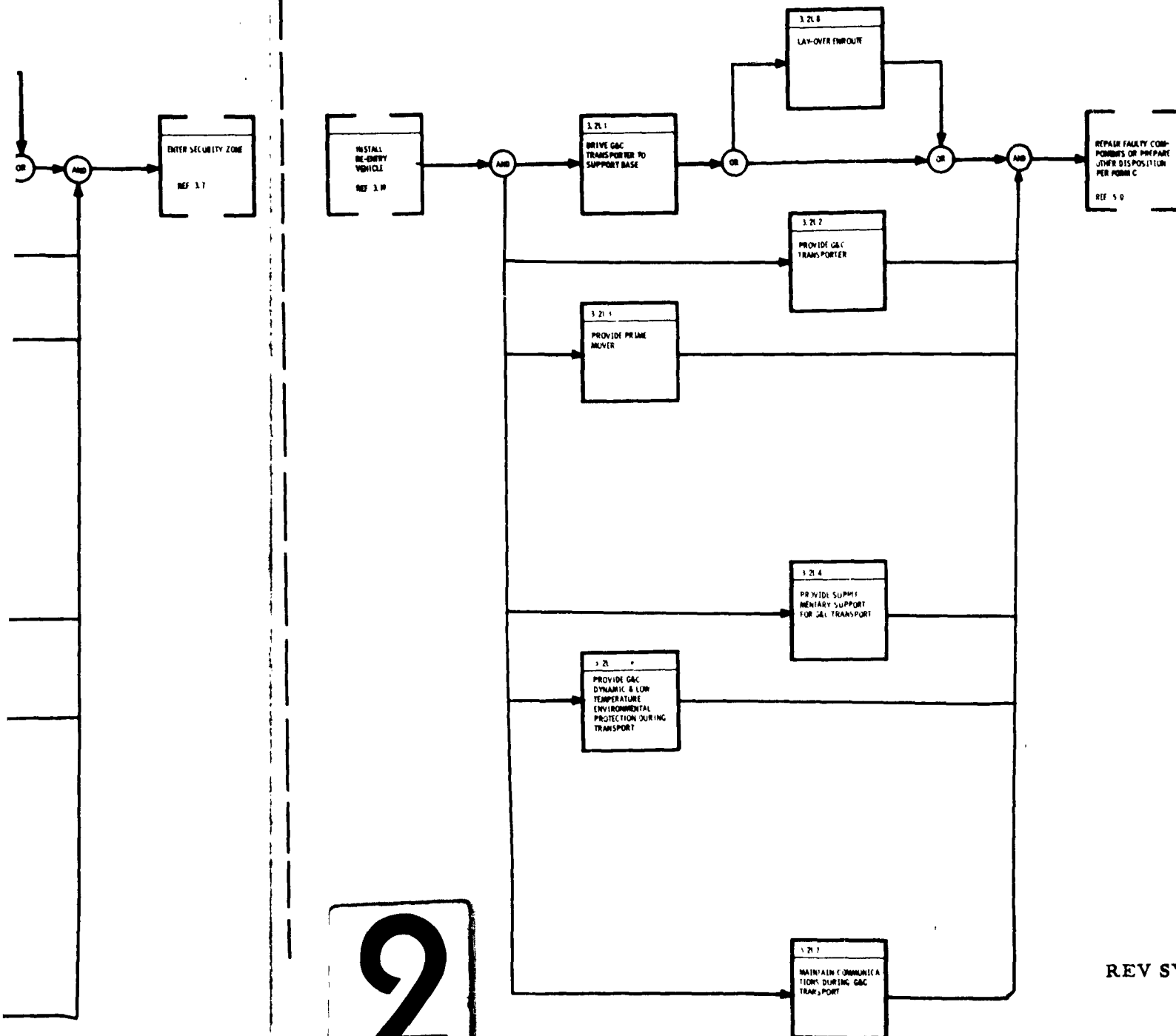
3.4.3  
PROVIDE PRIME  
MOVER

3.4.4  
PROVIDE SUPPLEMEN-  
TARY SUPPORT FOR  
GAC TRANSPORT

3.4.5  
PROVIDE GAC  
DYNAMIC  
ENVIRONMENTAL  
PROTECTION

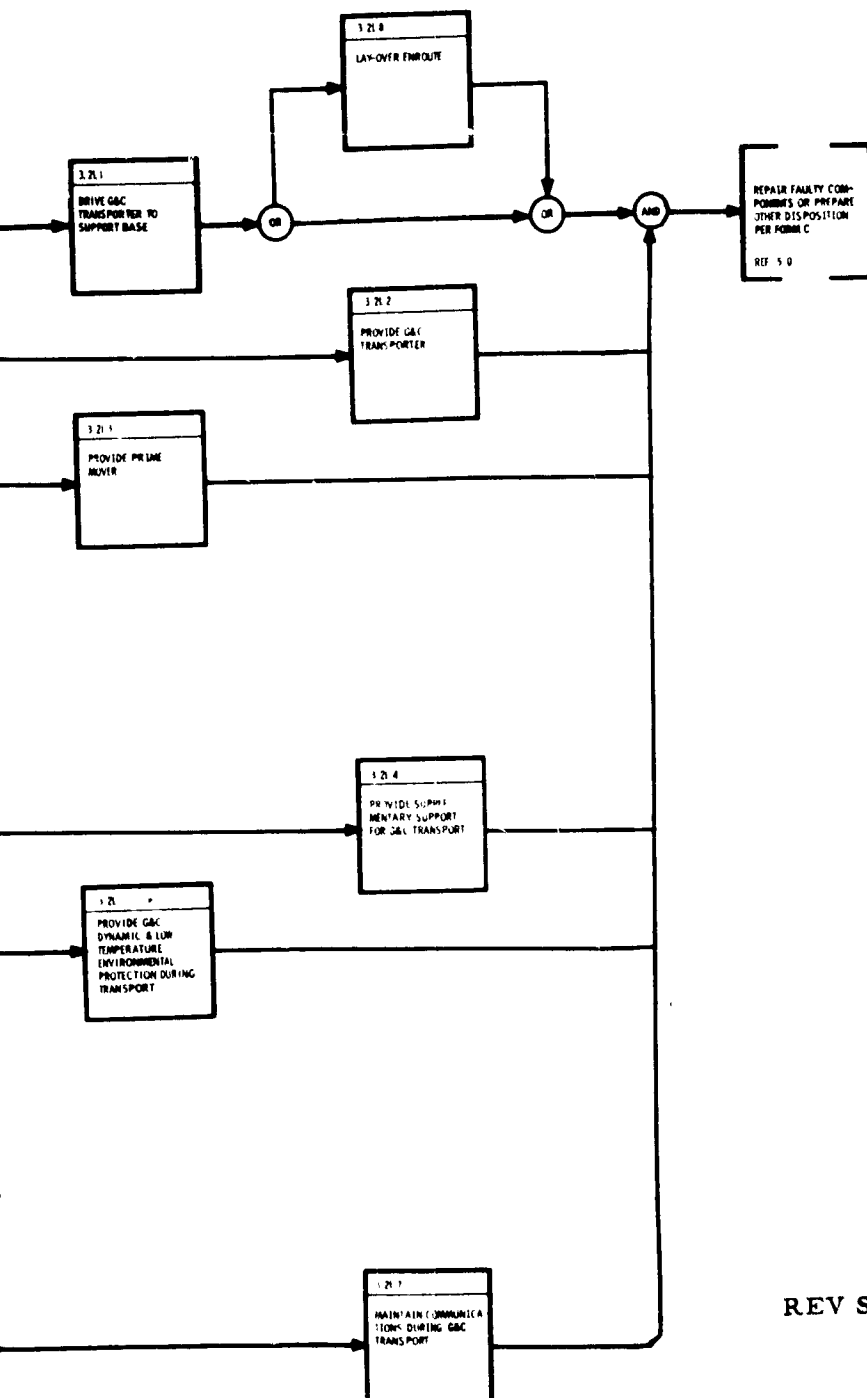
3.4.7  
MAINTAIN COMMUNICA-  
TION DURING GAC  
TRANSPORT

1



2

REV SYM C

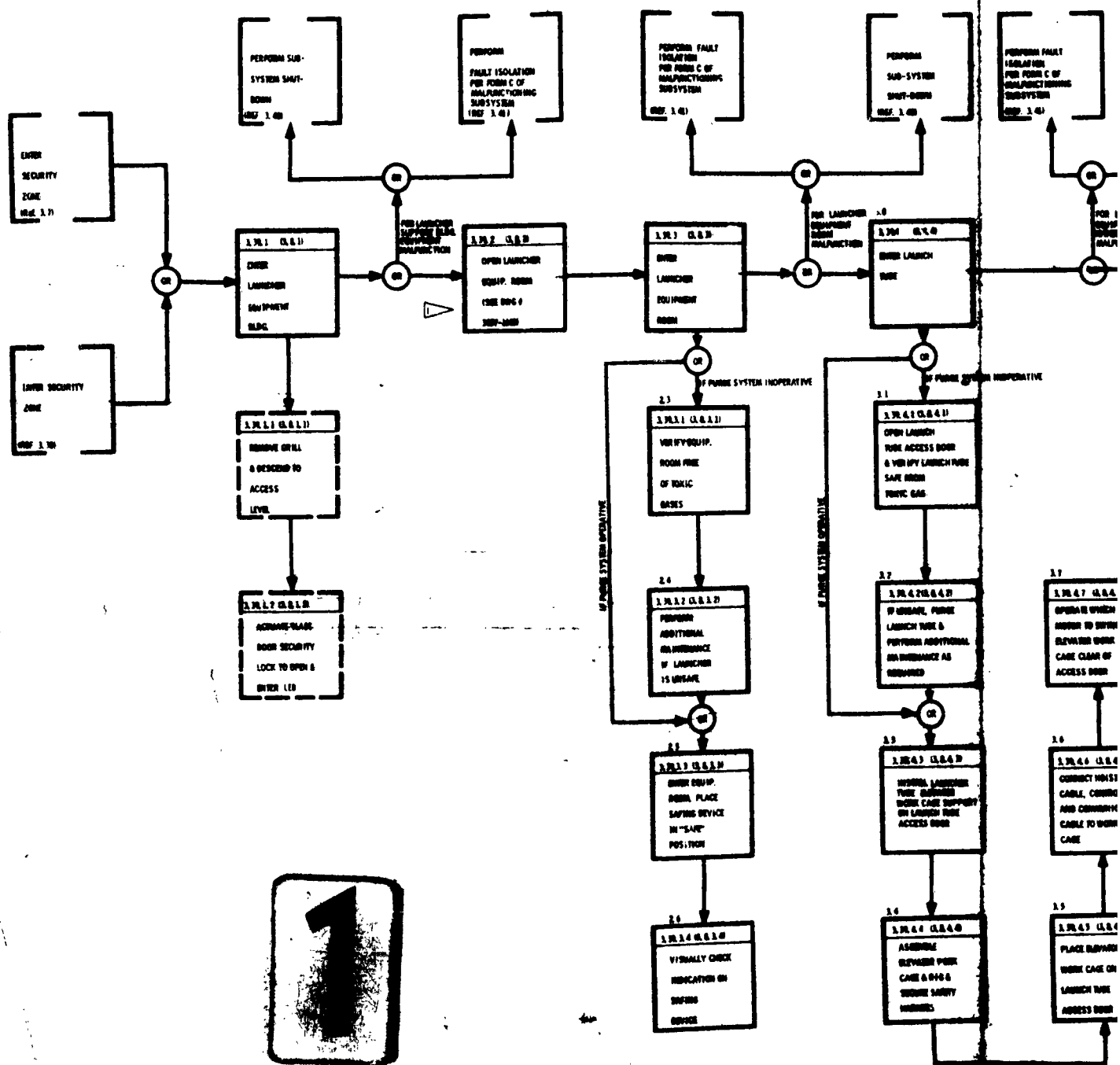


3

REV SYM C

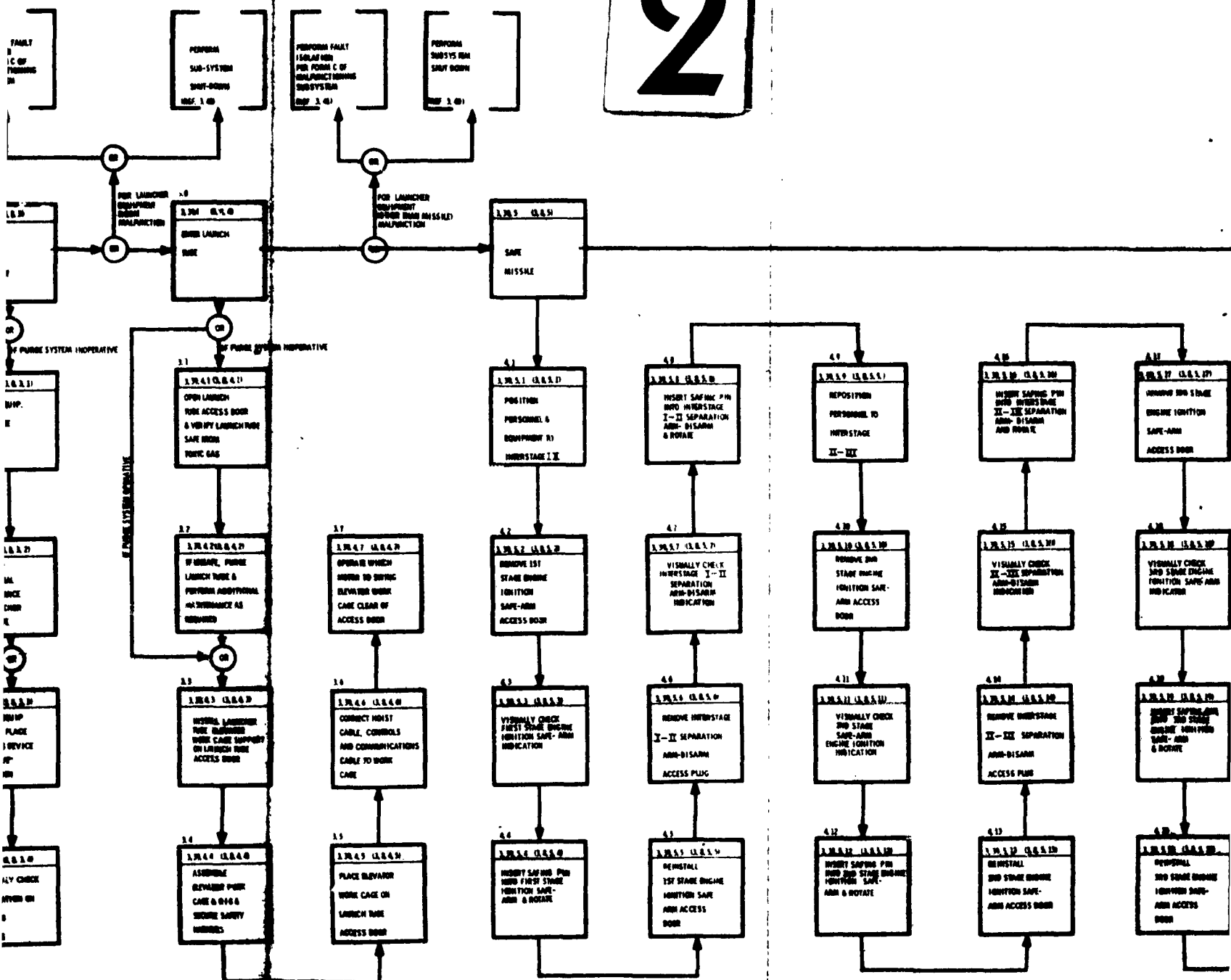
**BOEING** NO D2-30044-173  
SEC. IV PAGE 36

<b>BOEING</b>		DRAWING PREPARED BY		<b>MINUTEMAN WING XI</b>	
REVISION	DATE	<b>BOEING</b>		FLOW NAME:	
		AERO-SPACE DIVISION		TRANSPORT GSC SECTION 10	
				LAUNCHER (S. 10)	
				TRANSPORT GSC TO SUPPORT	
				BASE (S. 21)	
				SH. OF FLOW NO. 1463.2	

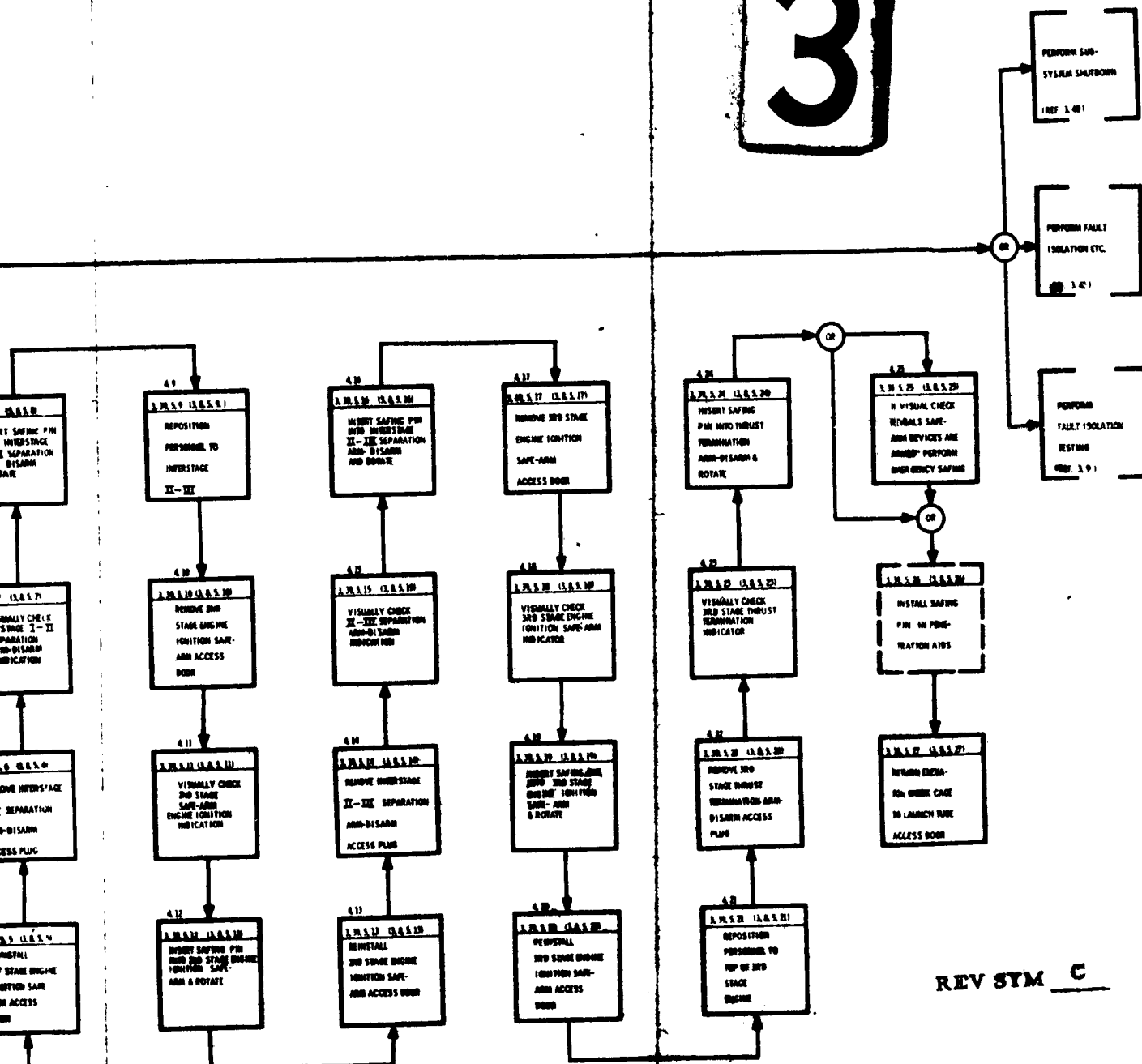




2



# 3



NOTE

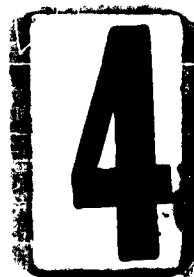
- H & B MAINTENANCE FOR LAUNCHER EQUIPMENT IN PARSONS REPORT 600-21
- FUNCTION NUMBERS 600
- THIS DRAWING IS NOT A WING 1 FUNCTIONAL PLAN

REV SYM C

NO E

SEC 1

DATE	BY	CHKD	APPD



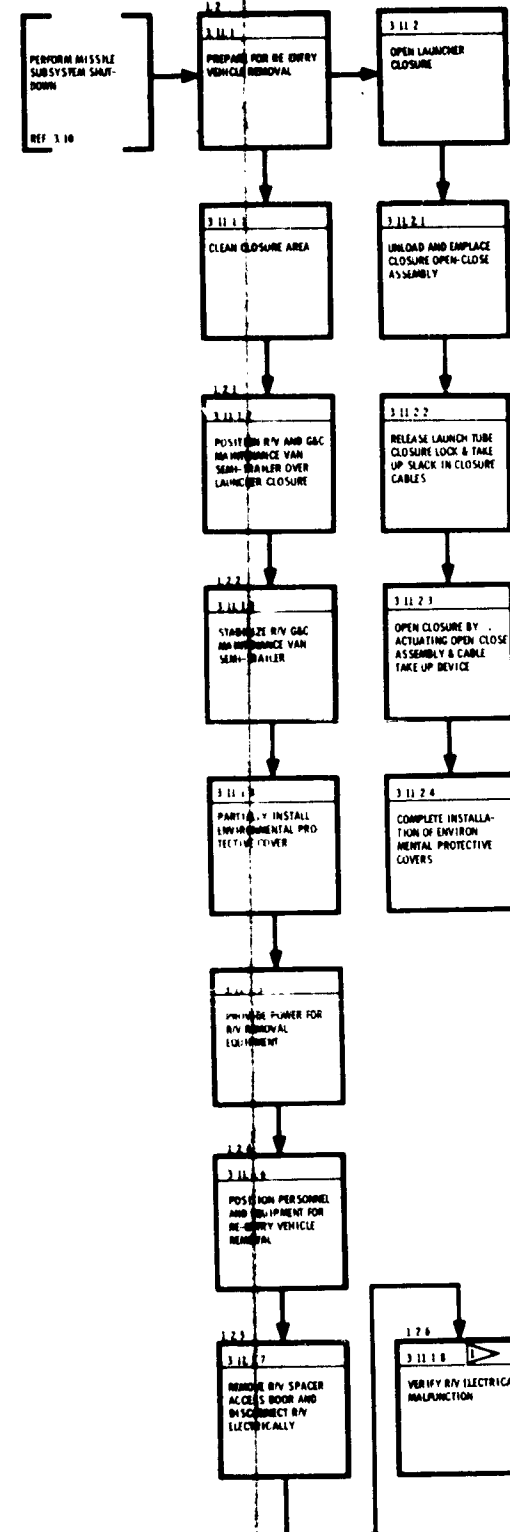
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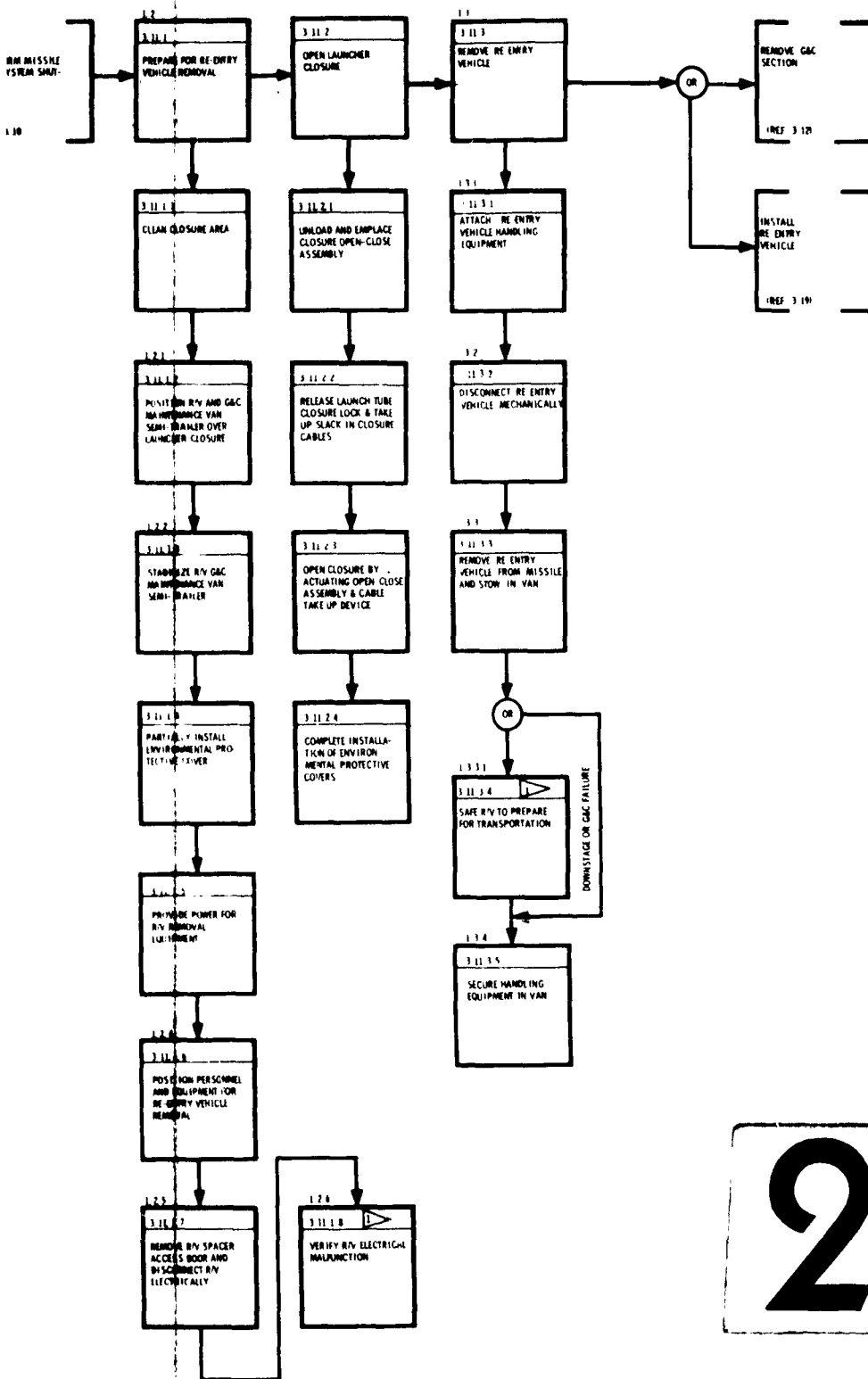
- 1992**

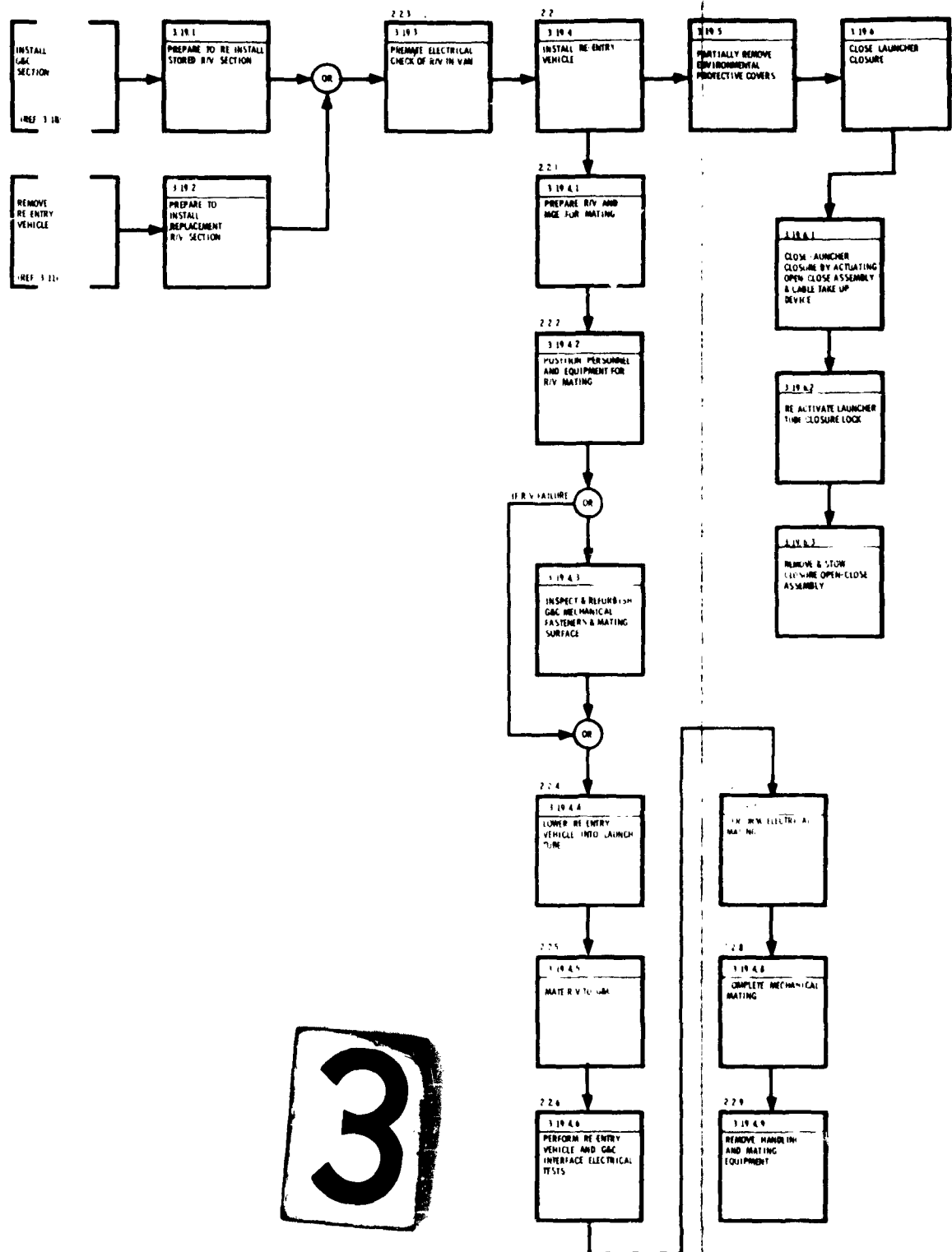
<b>REPORT</b>		DRAWING PREPARED BY:		<b>WHITTAKER WYOM INC</b>	
DATE:	BY:	<b>WHITTAKER</b>		PLAN NAME:	
		<b>ARCH-SPACE DIVISION</b>		1.0 <b>WHITTAKER WYOM INC</b>	
				2.0 <b>WHITTAKER WYOM INC</b>	
				3.0 <b>WHITTAKER WYOM INC</b>	
				4.0 <b>WHITTAKER WYOM INC</b>	
				5.0 <b>WHITTAKER WYOM INC</b>	
				6.0 <b>WHITTAKER WYOM INC</b>	
				7.0 <b>WHITTAKER WYOM INC</b>	
				8.0 <b>WHITTAKER WYOM INC</b>	
				9.0 <b>WHITTAKER WYOM INC</b>	
				10.0 <b>WHITTAKER WYOM INC</b>	
				11.0 <b>WHITTAKER WYOM INC</b>	
				12.0 <b>WHITTAKER WYOM INC</b>	
				13.0 <b>WHITTAKER WYOM INC</b>	
				14.0 <b>WHITTAKER WYOM INC</b>	
				15.0 <b>WHITTAKER WYOM INC</b>	
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				19.0 <b>WHITTAKER WYOM INC</b>	
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				21.0 <b>WHITTAKER WYOM INC</b>	
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				23.0 <b>WHITTAKER WYOM INC</b>	
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				27.0 <b>WHITTAKER WYOM INC</b>	
				28.0 <b>WHITTAKER WYOM INC</b>	
				29.0 <b>WHITTAKER WYOM INC</b>	
				30.0 <b>WHITTAKER WYOM INC</b>	
				31.0 <b>WHITTAKER WYOM INC</b>	
				32.0 <b>WHITTAKER WYOM INC</b>	
				33.0 <b>WHITTAKER WYOM INC</b>	
				34.0 <b>WHITTAKER WYOM INC</b>	
				35.0 <b>WHITTAKER WYOM INC</b>	
				36.0 <b>WHITTAKER WYOM INC</b>	
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				38.0 <b>WHITTAKER WYOM INC</b>	
				39.0 <b>WHITTAKER WYOM INC</b>	
				40.0 <b>WHITTAKER WYOM INC</b>	
				41.0 <b>WHITTAKER WYOM INC</b>	
				42.0 <b>WHITTAKER WYOM INC</b>	
				43.0 <b>WHITTAKER WYOM INC</b>	
				44.0 <b>WHITTAKER WYOM INC</b>	
				45.0 <b>WHITTAKER WYOM INC</b>	
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				49.0 <b>WHITTAKER WYOM INC</b>	
				50.0 <b>WHITTAKER WYOM INC</b>	
				51.0 <b>WHITTAKER WYOM INC</b>	
				52.0 <b>WHITTAKER WYOM INC</b>	
				53.0 <b>WHITTAKER WYOM INC</b>	
				54.0 <b>WHITTAKER WYOM INC</b>	
				55.0 <b>WHITTAKER WYOM INC</b>	
				56.0 <b>WHITTAKER WYOM INC</b>	
				57.0 <b>WHITTAKER WYOM INC</b>	
				58.0 <b>WHITTAKER WYOM INC</b>	
				59.0 <b>WHITTAKER WYOM INC</b>	
				60.0 <b>WHITTAKER WYOM INC</b>	
				61.0 <b>WHITTAKER WYOM INC</b>	
				62.0 <b>WHITTAKER WYOM INC</b>	
				63.0 <b>WHITTAKER WYOM INC</b>	
				64.0 <b>WHITTAKER WYOM INC</b>	
				65.0 <b>WHITTAKER WYOM INC</b>	
				66.0 <b>WHITTAKER WYOM INC</b>	
				67.0 <b>WHITTAKER WYOM INC</b>	
				68.0 <b>WHITTAKER WYOM INC</b>	
				69.0 <b>WHITTAKER WYOM INC</b>	
				70.0 <b>WHITTAKER WYOM INC</b>	
				71.0 <b>WHITTAKER WYOM INC</b>	
				72.0 <b>WHITTAKER WYOM INC</b>	
				73.0 <b>WHITTAKER WYOM INC</b>	
				74.0 <b>WHITTAKER WYOM INC</b>	
				75.0 <b>WHITTAKER WYOM INC</b>	
				76.0 <b>WHITTAKER WYOM INC</b>	
				77.0 <b>WHITTAKER WYOM INC</b>	
				78.0 <b>WHITTAKER WYOM INC</b>	
				79.0 <b>WHITTAKER WYOM INC</b>	

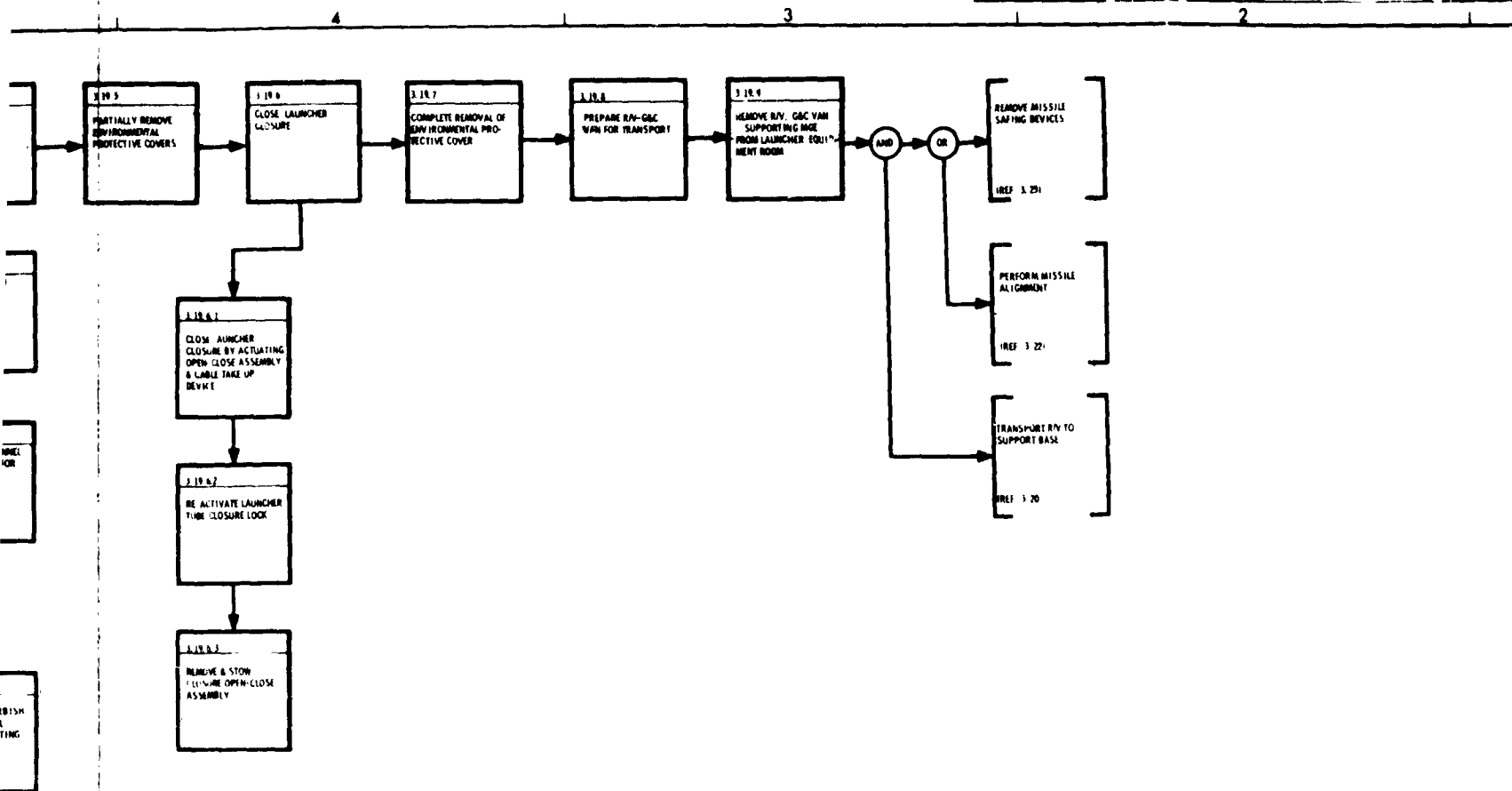
LCF OPERATOR HAS RECEIVED OPERATIONAL SYSTEM MALFUNCTION INDICATION. MCC HAS BEEN NOTIFIED. FAULT HAS BEEN ISOLATED TO AIRBORNE SYSTEM. R/V MUST BE REMOVED FOR REPAIR OF THE SYSTEM. THE LAUNCHER HAS BEEN ENTERED AND THE R/V SECTION WILL BE REMOVED.

1









NOTE:  
● THIS DRAWING IS NOT IN ACCORDANCE WITH OSD EXHIBIT 42-42 BEC WING 1 FUNCTIONAL FLOW DATA HAS BEEN USED WHERE POSSIBLE.

● ABBREVIATIONS USED ON THIS DRAWING ARE AS FOLLOWS  
R/V RE-ENTRY VEHICLE  
MCC MAINTENANCE CONTROL CENTER  
LCF LAUNCH CONTROL FACILITY  
GAC GUIDANCE & CONTROL

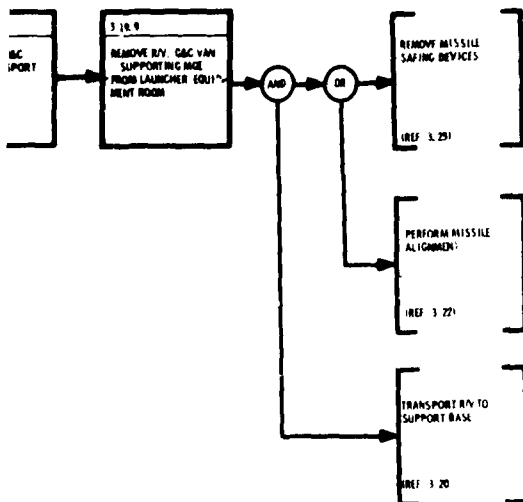
● THE FUNCTION NUMBERS ABOVE THE BONES ARE THE SAME FUNCTION WING 1 CDDG 25-2224 SHEETS 1 & 2

△ REQUIRED IF WARHEAD ALARM ONLY

4

REV SYM C





NOTE

- THIS DRAWING IS NOT IN ACCORDANCE WITH BSO EXHIBIT 62-42 BECAUSE WING 1 FUNCTIONAL FLOW DATA HAS BEEN USED WHERE POSSIBLE.
- ABBREVIATIONS USED ON THIS DRAWING ARE AS FOLLOWS:  
R/V RE-ENTRY VEHICLE  
MLC MAINTENANCE CONTROL CENTER  
LCF LAUNCH CONTROL FACILITY  
GAC GUIDANCE & CONTROL
- THE FUNCTION NUMBERS ABOVE THE BOXES ARE THE SAME FUNCTIONS AS WING 1 DWG. 25-2224 SHEETS 1 & 2

▷ REQUIRED IF WARHEAD ALARM ONLY

5

REV SYM C

BOEING

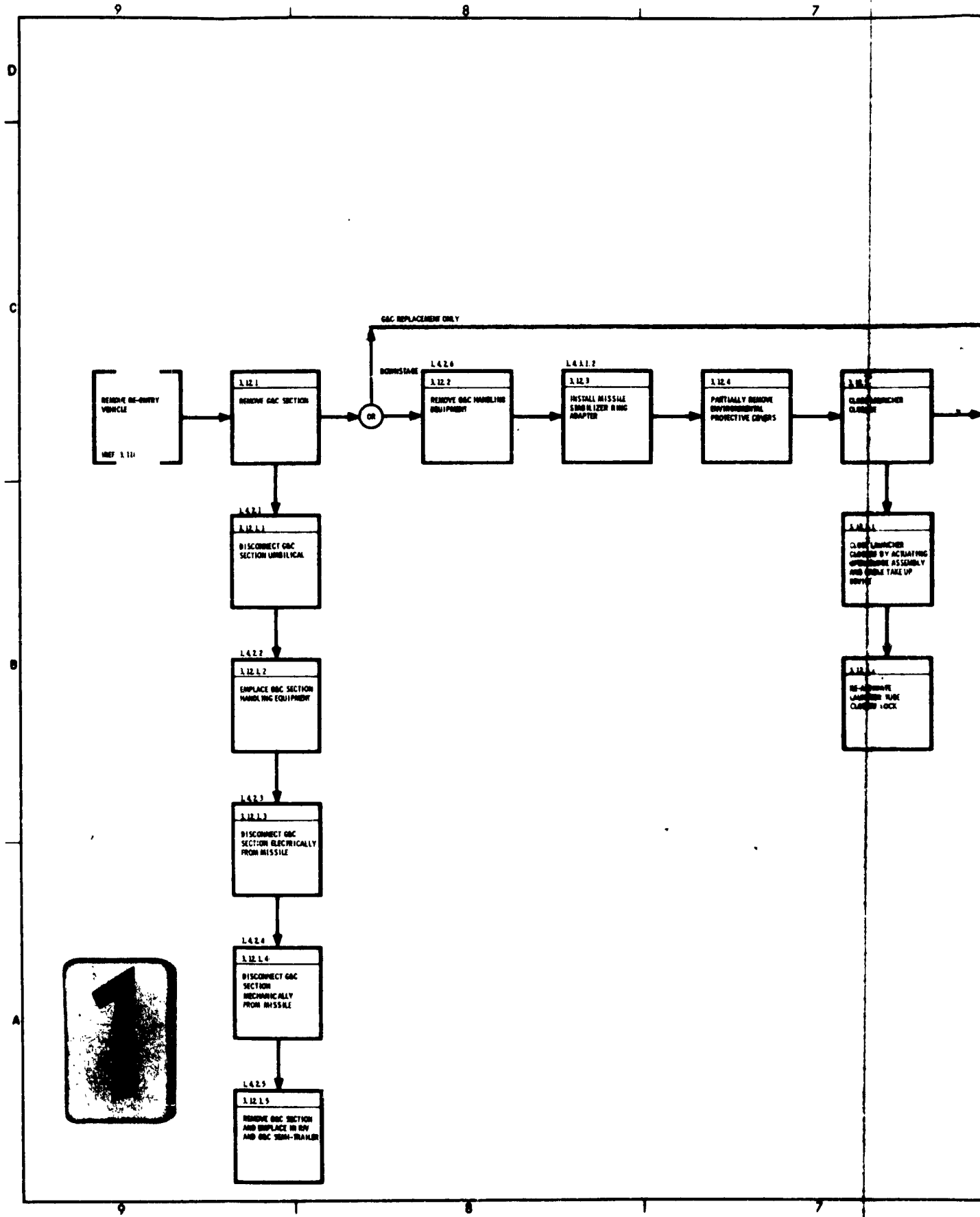
NO D2-30044-1B

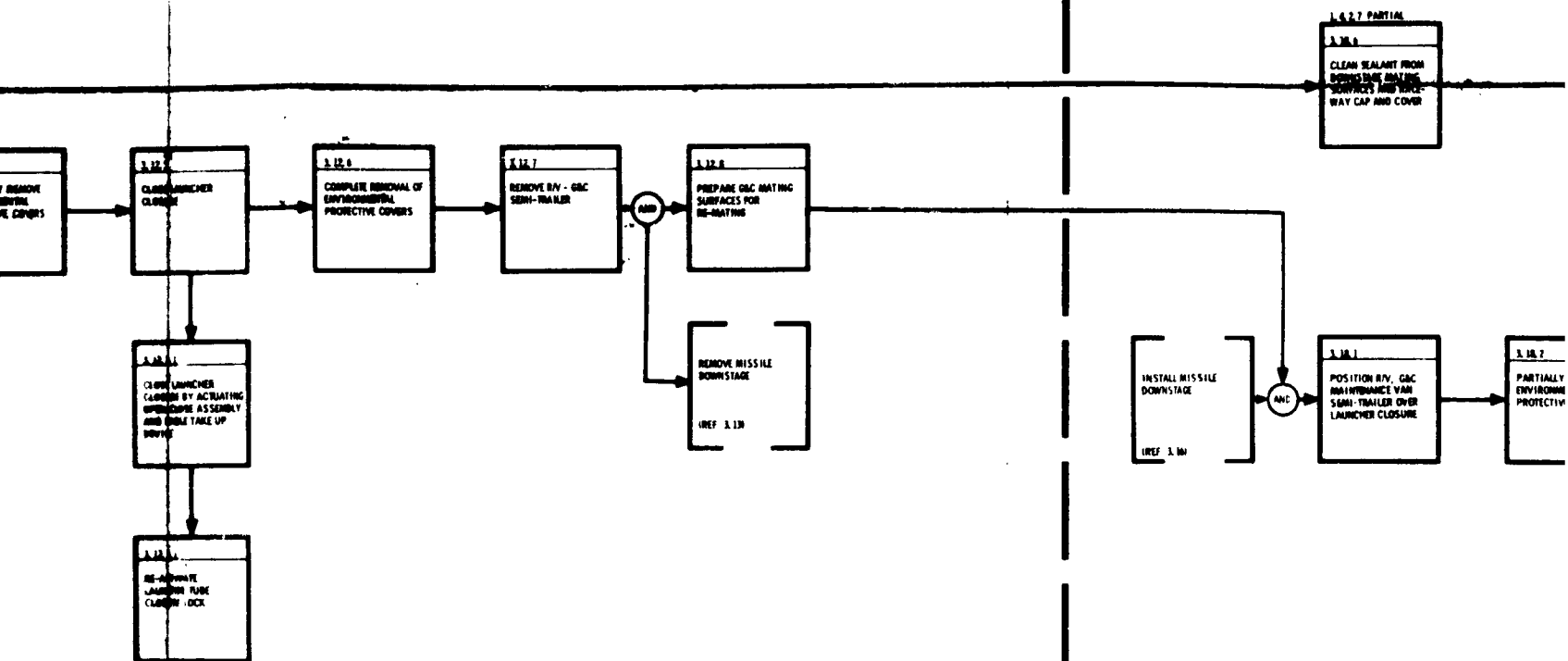
SEC IV

PAGE 38

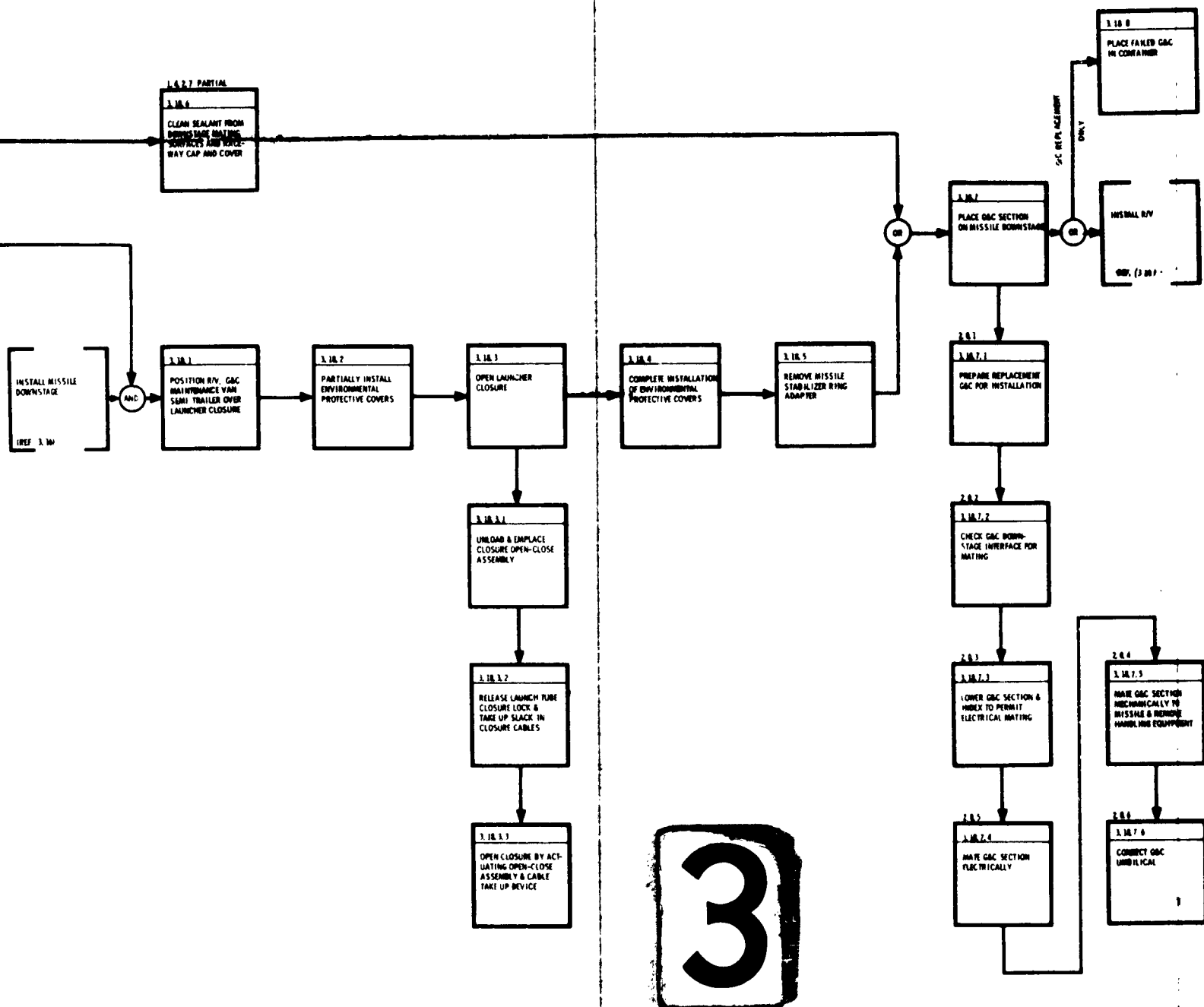
BOEING		DRAWING PREPARED BY		MINUTEMAN WING XI	
REVISION	DATE	BOEING		FLOW NAME	
		AERO-SPACE DIVISION		REMOV R/V 13 11	
				YUSMALL R/V 13 11	
				SH OF FLOW NO. 3 11 & 12	



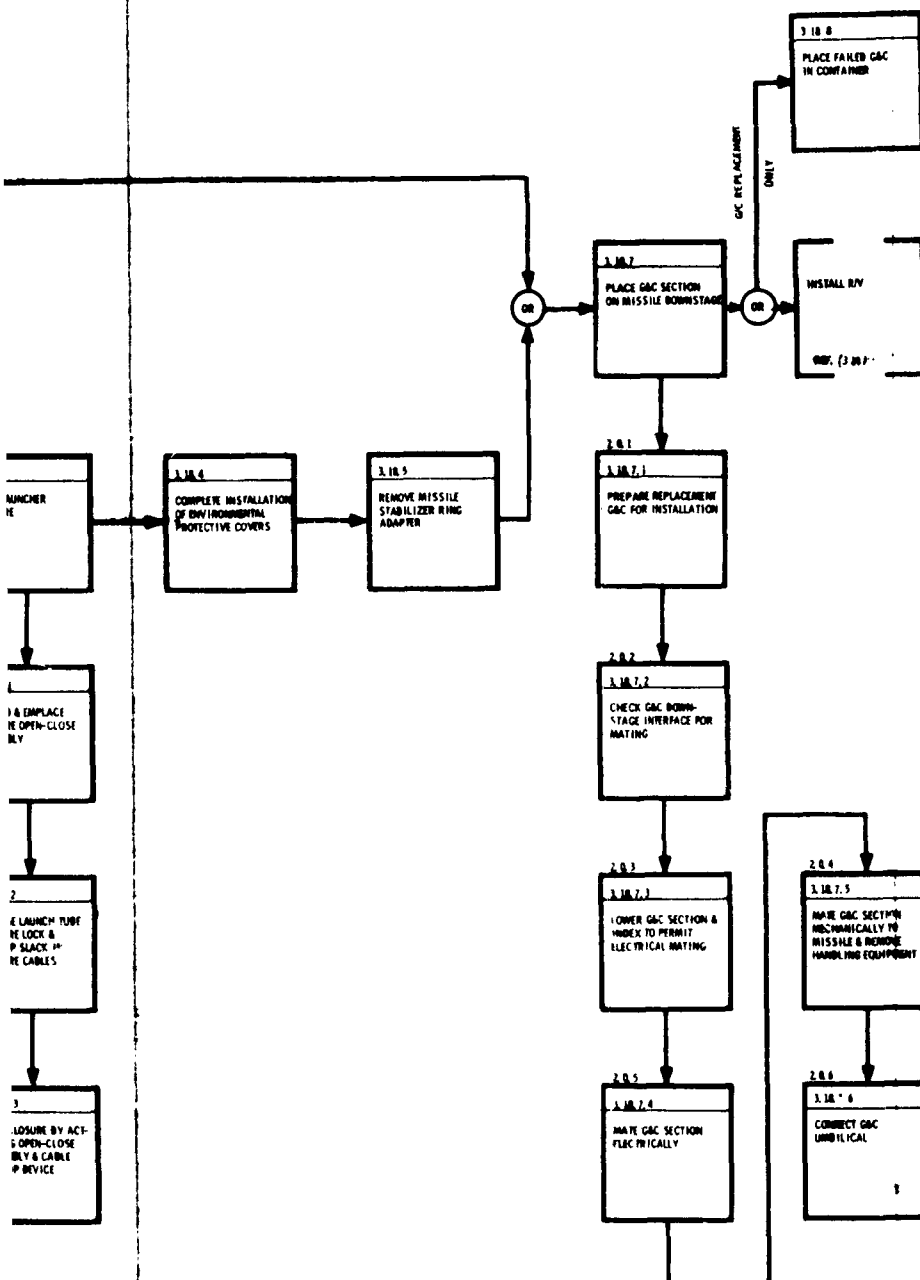




2



REV SY



# 5

## NOTE

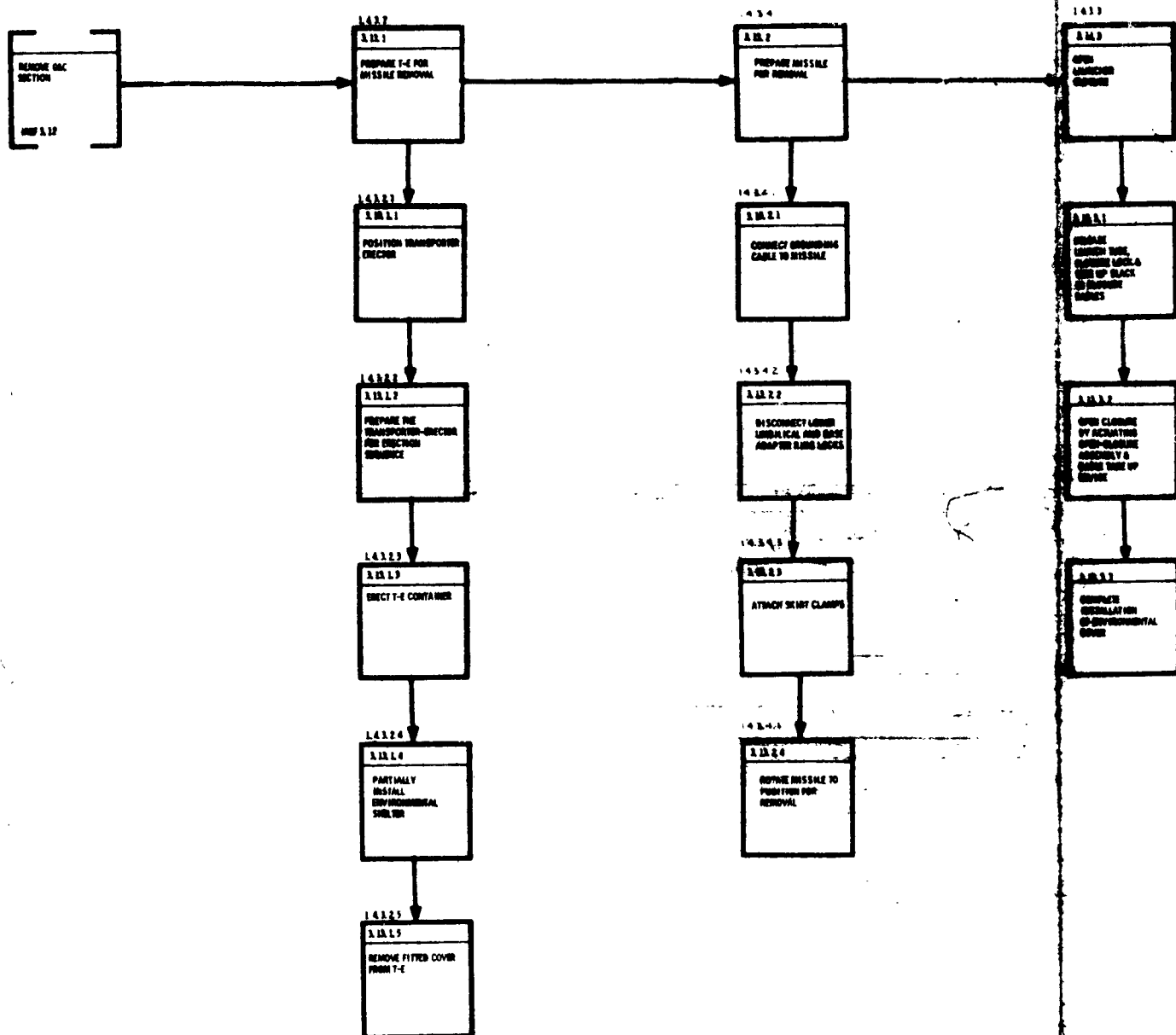
- THE FUNCTION NUMBERS ABOVE THE FUNCTION BOXES ARE FROM WING 1 DWG 25-22200 SHEET 1 & 2
- THIS DRAWING IS NOT IN ACCORDANCE WITH 38 CFR 101.11 62-42 BECAUSE WING 1 FUNCTIONAL FLOW DATA HAS BEEN USED WHERE POSSIBLE.

**BOEING** NO D2-30044-1B

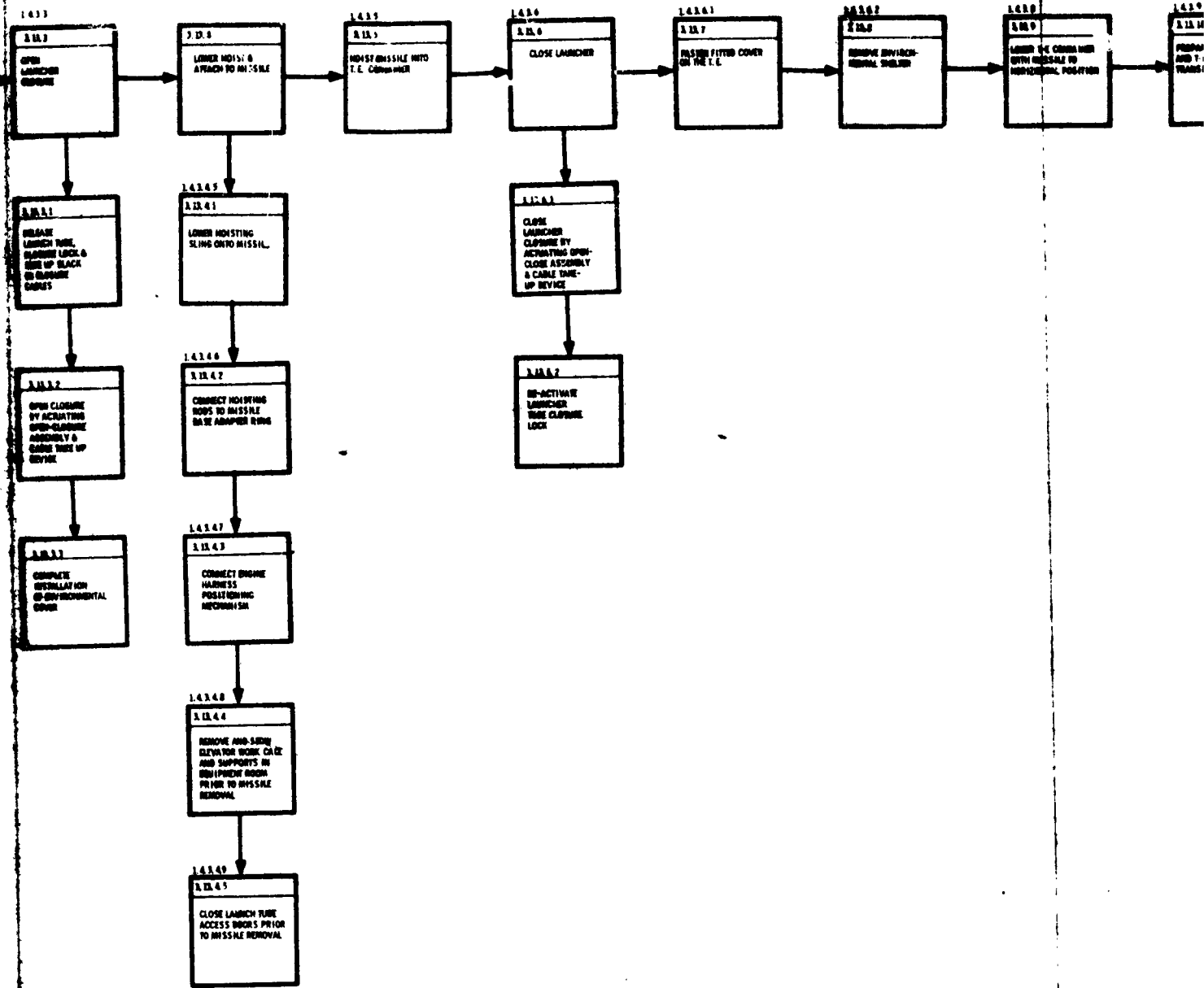
SEC. IV PAGE 39

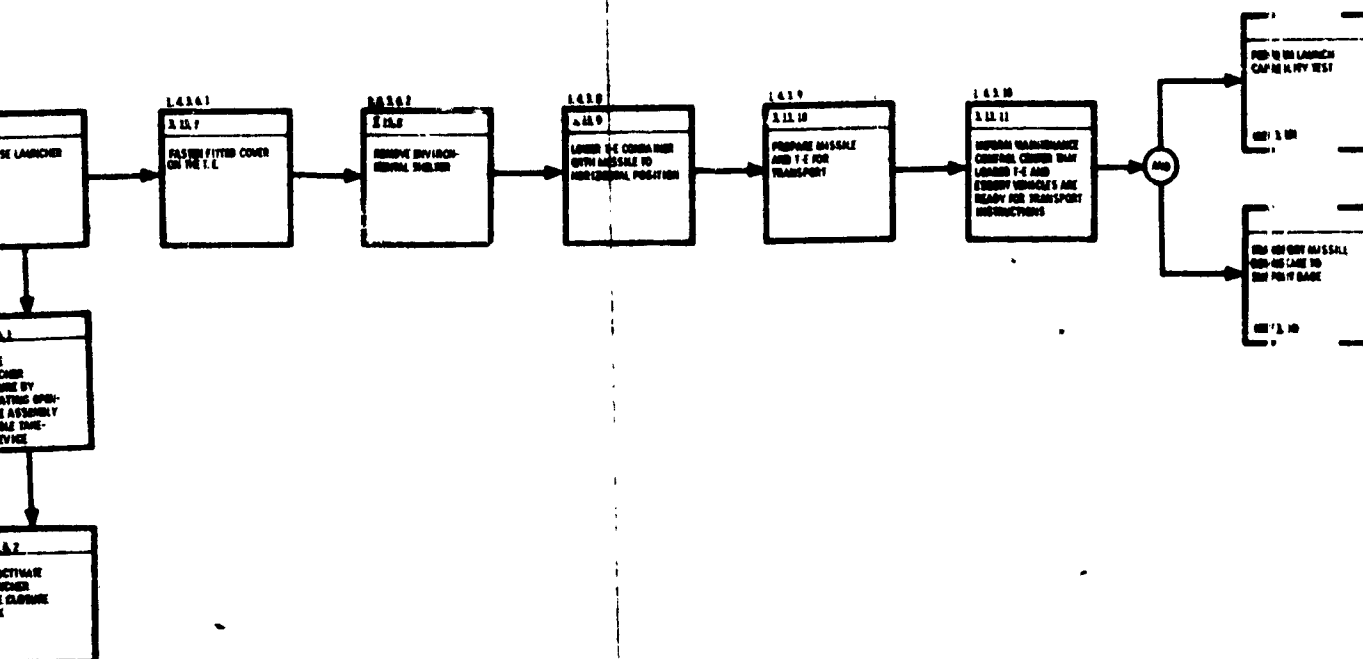
REV SYM C

BOEING		DRAWING PREPARED BY		MINUTEMAN WING 1	
REVISION	DATE	BOEING		FLOW NAME	
		AERO-SPACE DIVISION		REMOVE GAC SECTION (3.18)	
				AND	
				THE TALL GAC SECTION (3.18)	
				SH. OF FLOW NO. 3.18.8.1	



1





NOTE:  
THE BARRELS ABOVE THE FUNCTION  
OF THE 3-2000 SHEETS 1 AND 2

THIS DRAWING IS NOT IN ACCORDANCE  
WITH FUNCTIONAL FLOW BASED 141

ADDITIONAL  
T.E. - TRANSPORTATION

3

REV SYM 6

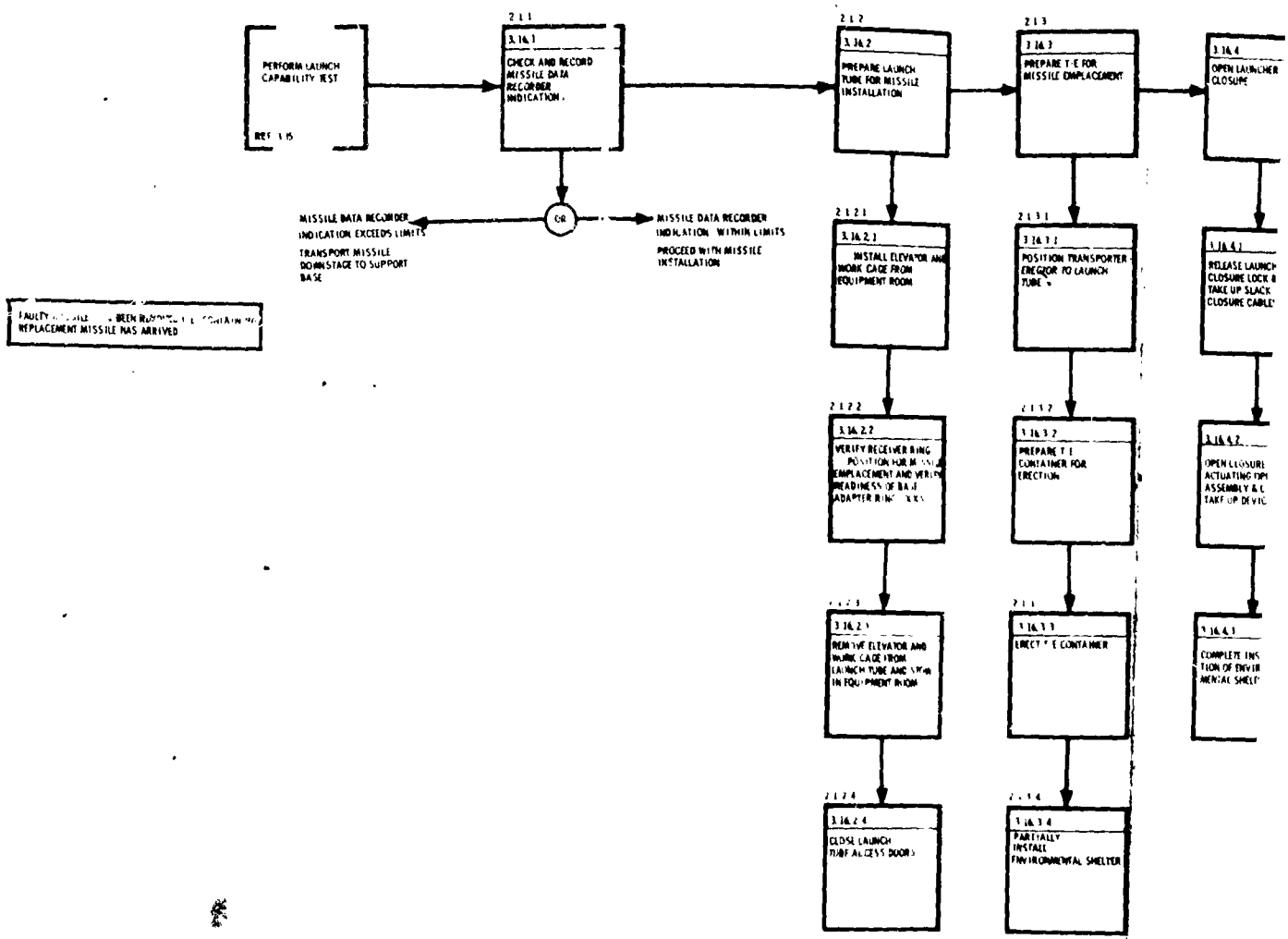
NO 12-1004  
SEC IV

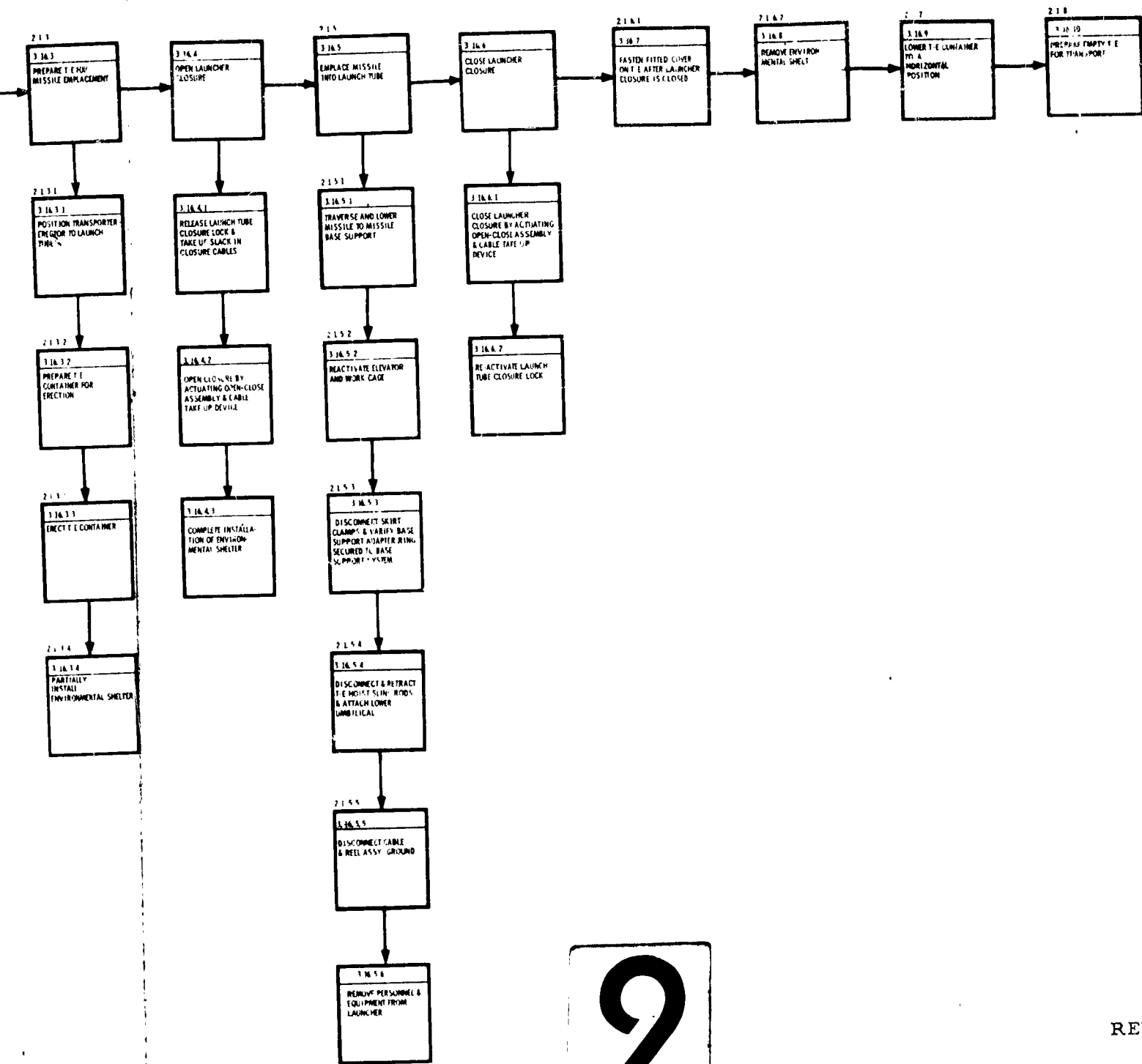
REVISION	REVISION	REVISION
1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	21
22	23	24
25	26	27
28	29	30
31	32	33
34	35	36
37	38	39
40	41	42
43	44	45
46	47	48
49	50	51
52	53	54
55	56	57
58	59	60
61	62	63
64	65	66
67	68	69
70	71	72
73	74	75
76	77	78
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85	86	87
88	89	90
91	92	93
94	95	96
97	98	99
100	101	102

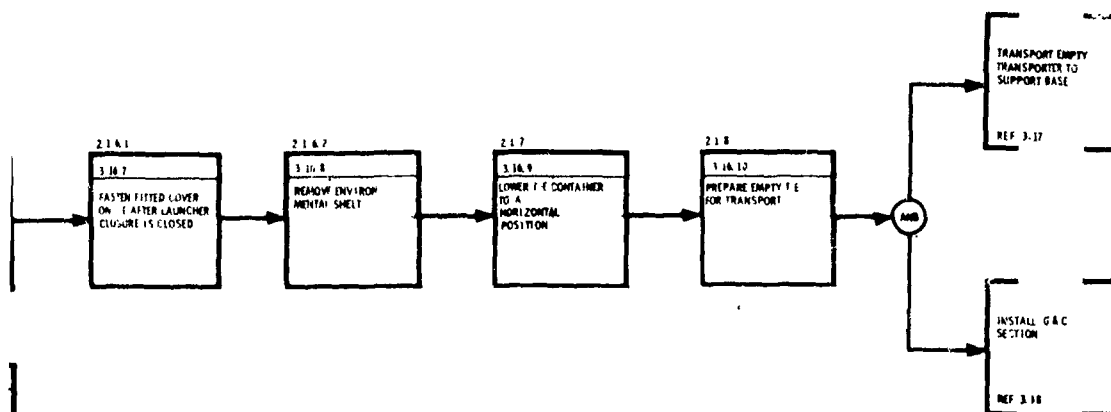




1







3

INSTALLATION OF REPLACEMENT DOWNSTAGE IS COMPLETE

ABBREVIATIONS  
T E TRANSPORTER DIRECTOR

NOTE

- THE LAYOUT OF THIS DRAWING DOES NOT COMPLY WITH AFMSSO EXHIBIT 62-62
- FUNCTION NUMBER ABOVE BOXES ARE FROM WING I DRAWING 25-22294 SHEET 2

REV SYM C

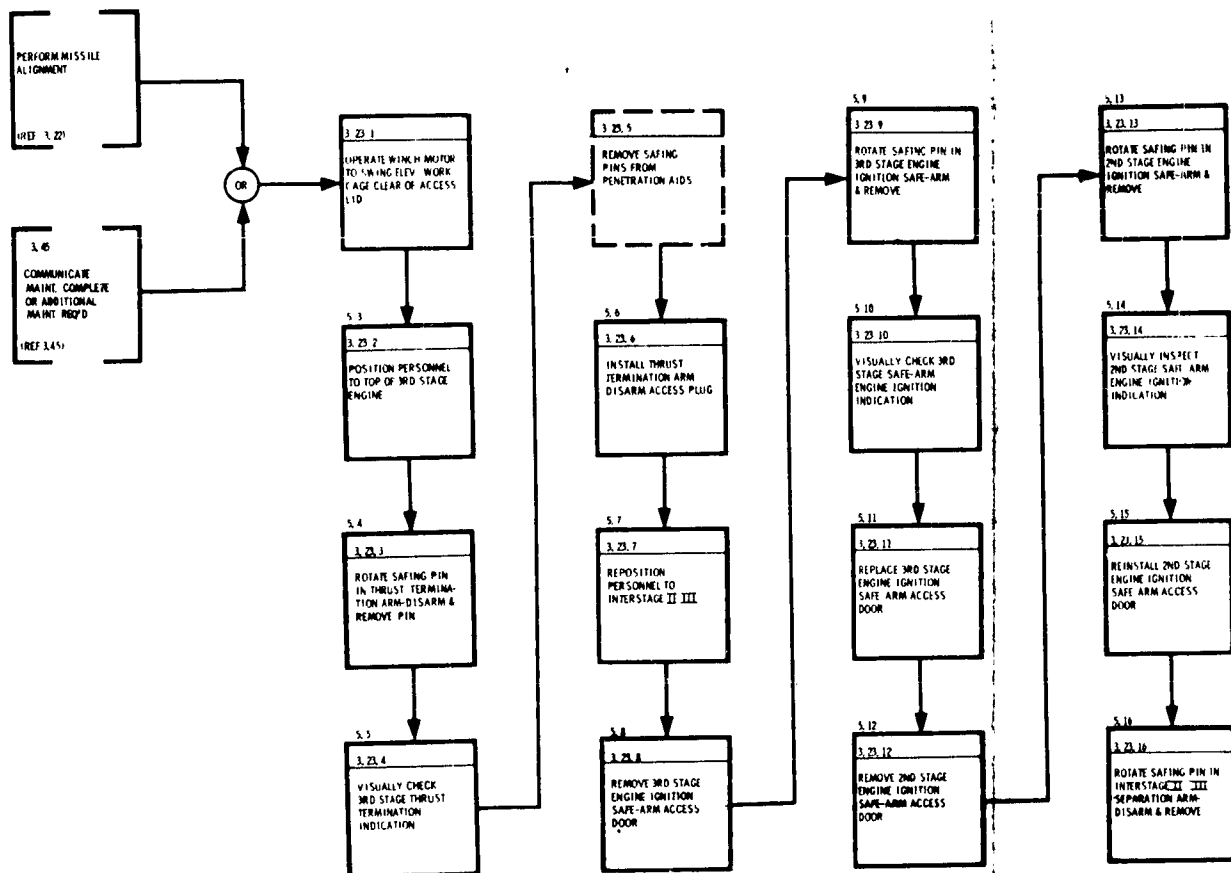
**BOEING** NO D2-30044-1B

SEC IV

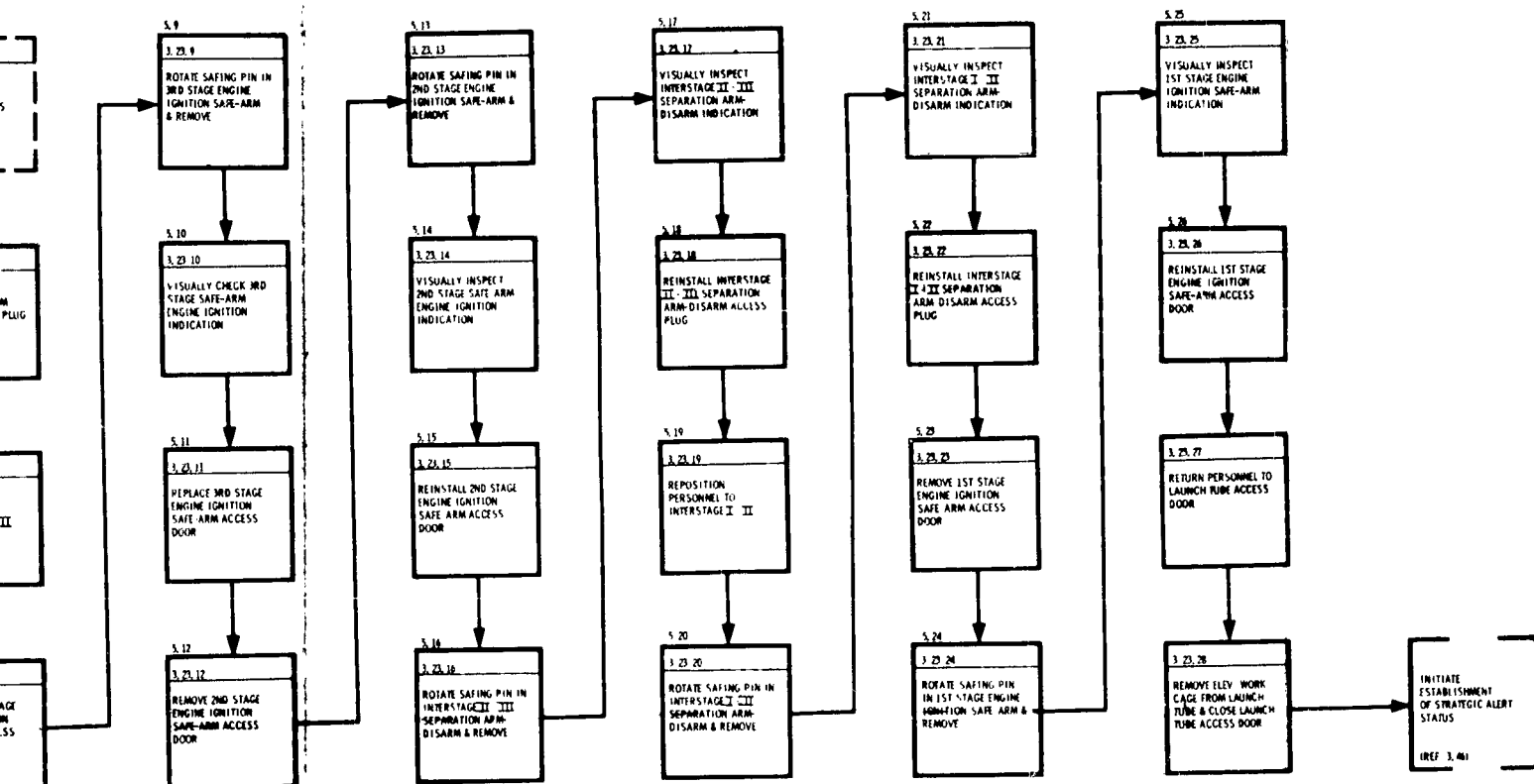
PAGE 41

<b>BOEING</b>		DRAWING PREPARED BY:		MINUTEMAN WING XI	
DIVISION	DATE	AERO-SPACE DIVISION		FLOW NAME	
		BY		INSTALL	
		CHECKED		MISSILE	
		APPROVED		POWERS DRAFT	
		DATE		SH OF FLOW NO. 3.16	

LEAD IN  
AVE. OGE MGE OR RP IE MAINTENANCE  
WITHIN THE SILO HAVING BEEN  
SATISFACTORILY COMPLETED THE  
SAFED MISSILE MUST AGAIN BE  
ARMED PRIOR TO RETURNING  
THE SITE TO THE STRATEGIC ALERT  
CONDITION



1



2

REV SYM C

DOE



FUNCTION NUMBERS ABOVE BLOCK ARE FROM WING 1 DRAWING 25-10037 SHEET 1

<b>BSENG</b>		DRAWING PREPARED BY <b>BSENG</b>	<b>MINUTEMAN WING I</b>
REVISION	DATE	AERO-SPACE DIVISION	FLOW NAME
			REMOVE MISSILE SAFETY DEVICE
		CHECKED BY	
		DATE	
		SIGNED BY	
		DATE	
		SHEET NO.	
		TOTAL SHEETS	
		SM OF	FLOW NO. 1.29

CSC HAS RECEIVED NOTIFICATION OF THE EXISTENCE OF AN EMERGENCY CONDITION AND HAS DISPATCHED EMERGENCY CROPS, EQUIPMENT AND VEHICLES TO CORRECT THE EMERGENCY CONDITION.

4.1  
COMMUNICATE EMERGENCY NOTIFICATION  
SYL **URGENT**

FROM: ESCORT RADIO  
POLICE  
LCF

REPORT STATUS  
SEE DETAIL DIAGRAM  
REF. 2.48

OR

4.2  
RECEIVE EMERGENCY NOTIFICATION  
**URGENT**

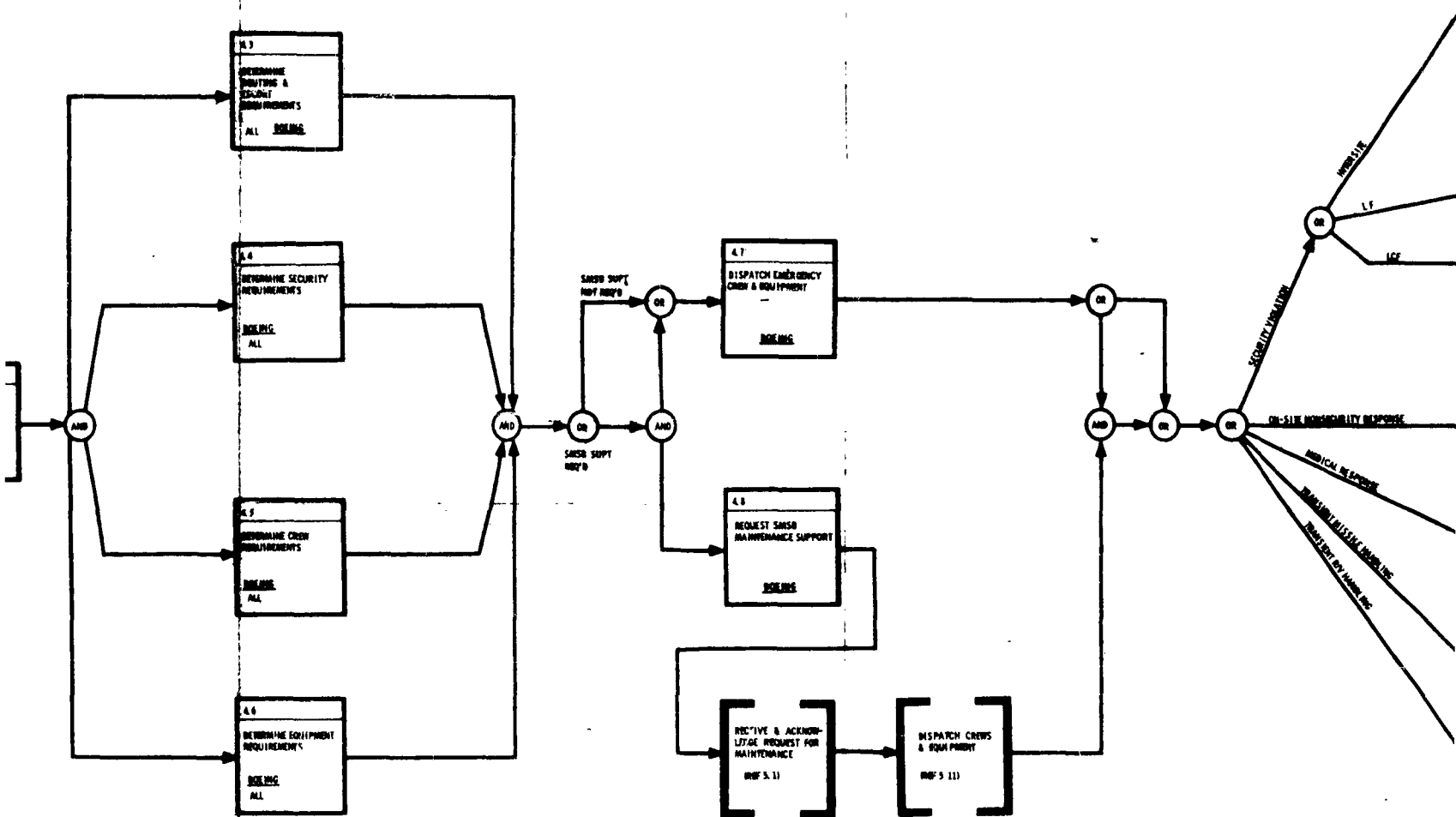
4.3  
DETERMINE ROUTING & ESCORT REQUIREMENTS  
**URGENT**  
ALL

4.4  
DETERMINE SECURITY REQUIREMENTS  
**URGENT**  
ALL

4.5  
DETERMINE CROW REQUIREMENTS  
**URGENT**  
ALL

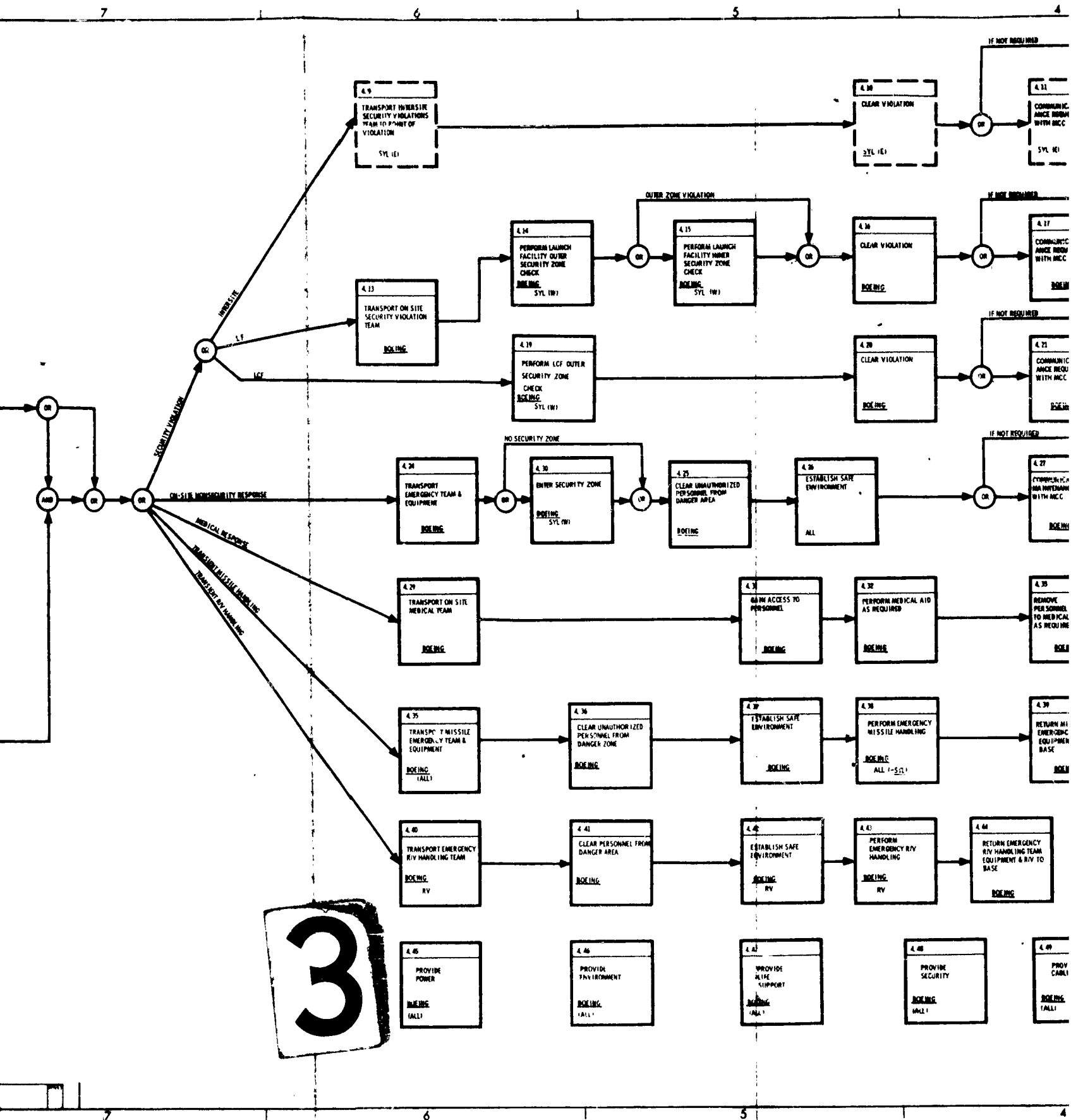
4.6  
DETERMINE EQUIPMENT REQUIREMENTS  
**URGENT**  
ALL

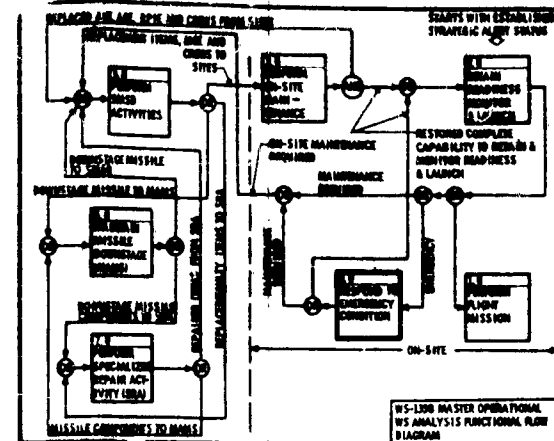
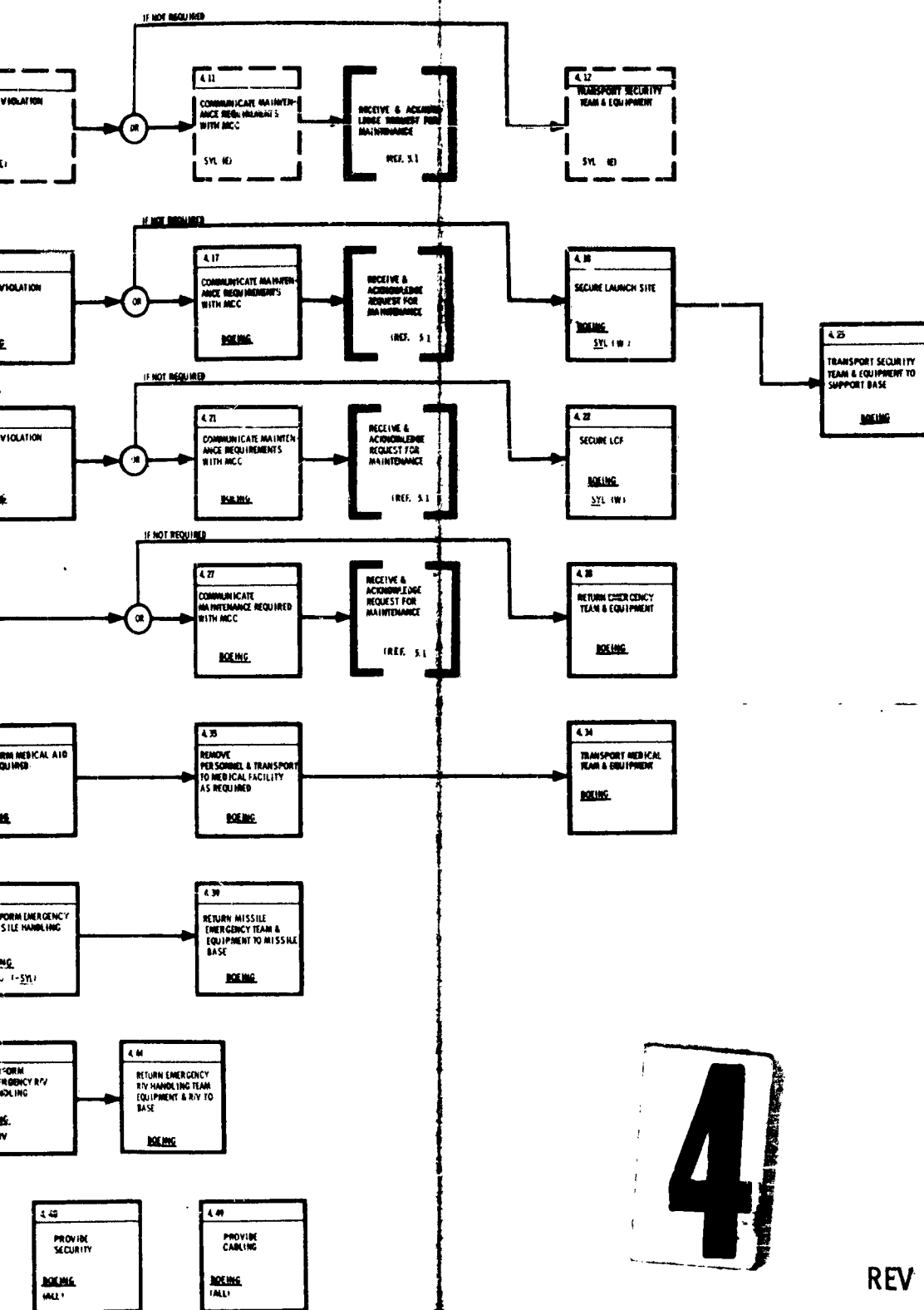
1



2







NOTES  
THIS FLOW IS LIMITED TO IDENTIFICATION OF RESPONSES TO INCIDENT OR ACTUAL CANNIS/PROCESSES WHICH CAN HAVE IMPACTED PERSONNEL AND/OR SURROUNDING AREA

ABBREVIATIONS USED ON THIS DRAWING  
BOEING THE BOEING COMPANY  
SYL SYLVANIA  
AM AUTOMATICS  
I-PROP PROPELLION  
TCC THERMAL CHEMICAL  
ABC ABSTRACT GENERAL CO  
GPP GOVERNMENT PROGRAMS  
RV USED AS INDICATING CONTRACTOR RESP

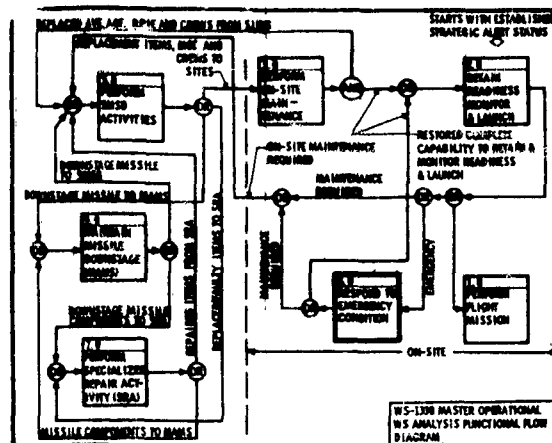
PRIME RESPONSIBILITY FOR COLLATION FUNCTION, IS DENOTED BY UNDERLINING

THE EMERGENCY CONDITION HAS BEEN BEGUN PERFORMED, THE SYSTEM IS IN EMERGENCY CONDITION HAVE SECURED IN SAVED BY THE VEHICLES AND EQUIPMENT PERFORMED THE SYSTEM MUST BE OF THE SWIRLS PRIOR TO SECURING THE FAC

REV SYM C

BOEING NO D2-30044-1B

SEC IV PAGE 43



4.25  
TRANSPORT SECURITY  
TEAM & EQUIPMENT TO  
SUPPORT BASE  
BOEING

4.12  
TRANSPORT SECURITY  
TEAM & EQUIPMENT  
SYL (W)

4.10  
SECURE LAUNCH SITE  
BOEING  
SYL (W)

4.22  
SECURE LCF  
BOEING  
SYL (W)

4.20  
RETURN EMERGENCY  
TEAM & EQUIPMENT  
BOEING

4.14  
TRANSPORT MEDICAL  
TEAM & EQUIPMENT  
BOEING

5

NOTES  
THIS FLOW IS LIMITED TO  
IDENTIFICATION OF RESPONSES  
TO INCIDENT OR ACTUAL  
CAUSING THREATS WHICH CAN  
HAVE IMPROVED PERFORMANCE  
AND/OR SURROUNDING AREA

ABBREVIATIONS USED ON THIS DRAWING ARE AS FOLLOWS

BOEING THE BOEING COMPANY  
SYL SYLVANIA  
SYL (W) SYLVANIA (WEST)  
AM AUTOMOTICS  
I-PROP) PROPELLION  
TCC THOROL CHEMICAL CORPORATION  
AGC AEROMET GENERAL CORPORATION  
GFP GOVERNMENT FURNISHED PARTS  
RY USER AS INDICATING AN UNDEVELOPED  
CONTRACTOR RESPONSIBILITY

PRIME RESPONSIBILITY FOR COLLATION OF ANALYSIS DATA, FOR A  
FUNCTION, IS DENOTED BY UNDERLINING OF ASSOCIATE CONTRACTOR

THE EMERGENCY CONDITION HAS BEEN CLEARED. IF MAINTENANCE HAS NOT  
BEEN PERFORMED, THE SYSTEM IS IN STRATEGIC ALERT STATUS AND THE  
EMERGENCY CHIEFS HAVE SECURED THE FACILITY AND RETURNED TO CSC OR  
SASER WITH VEHICLES AND EQUIPMENT. IF MAINTENANCE HAS BEEN  
PERFORMED THE SYSTEM MUST BE BROUGHT TO STRATEGIC ALERT  
STATUS PRIOR TO SECURING THE FACILITY

REV SYM C

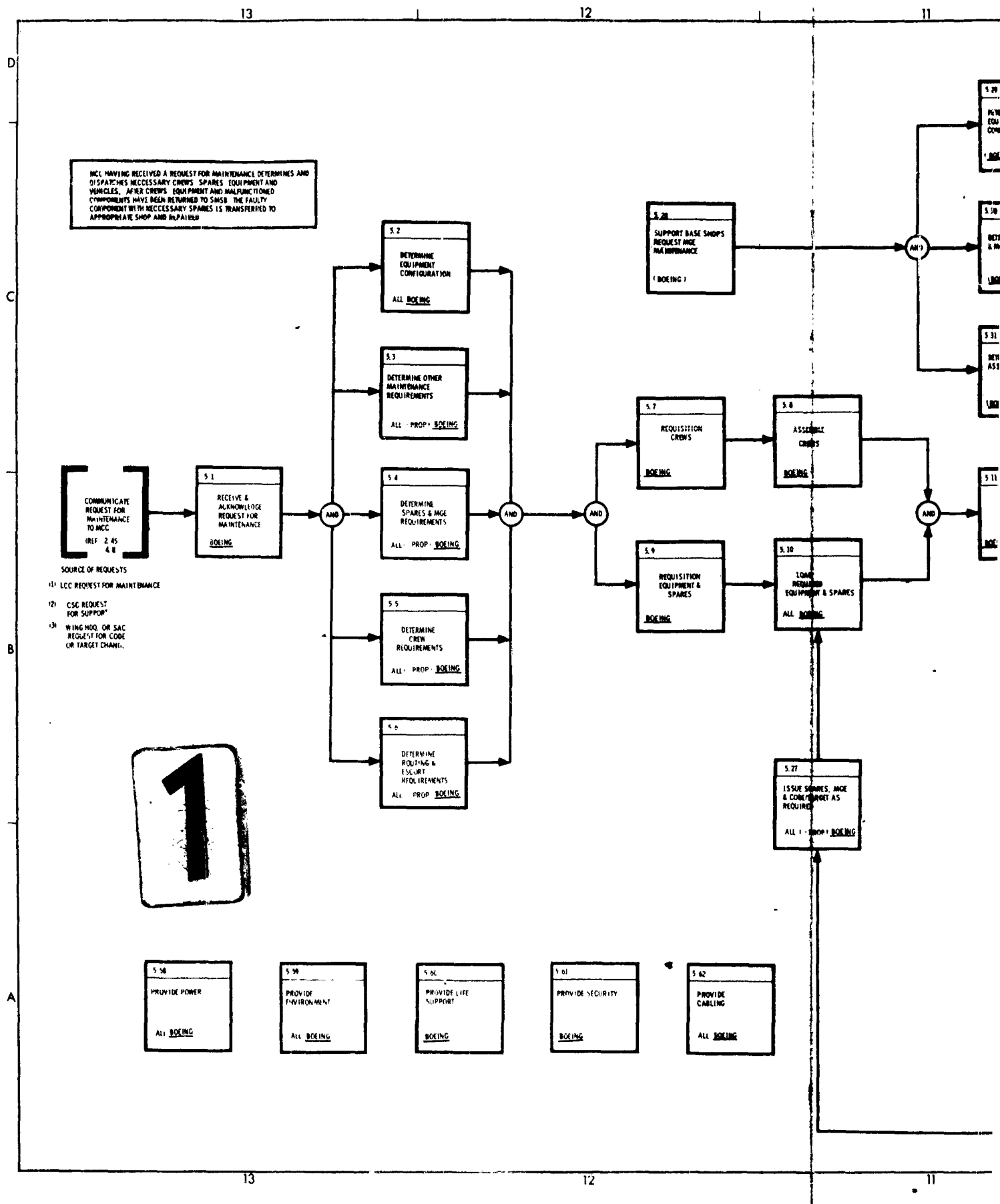
BOEING

NO D2-30044-1B

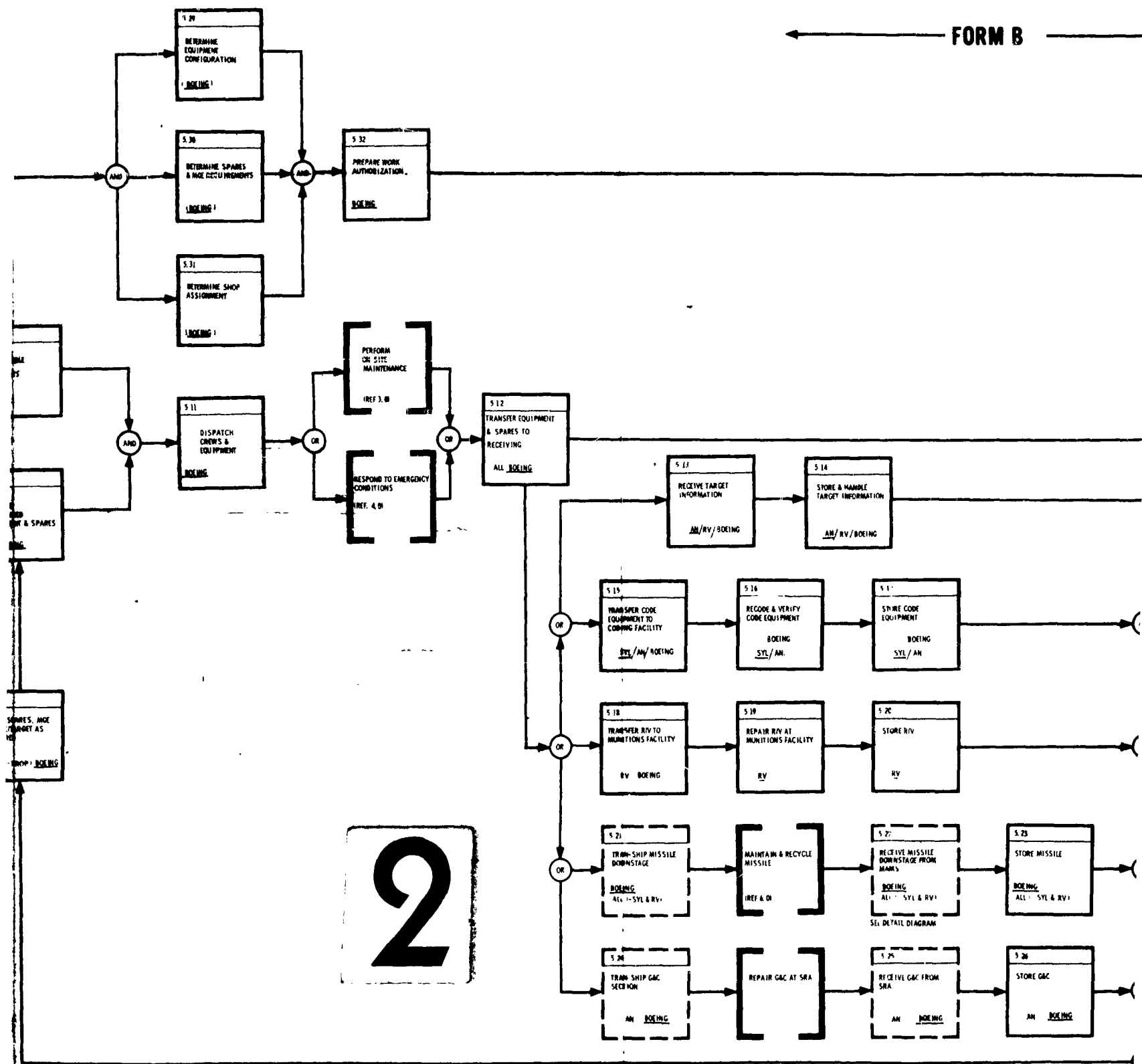
SEC. IV

PAGE 43

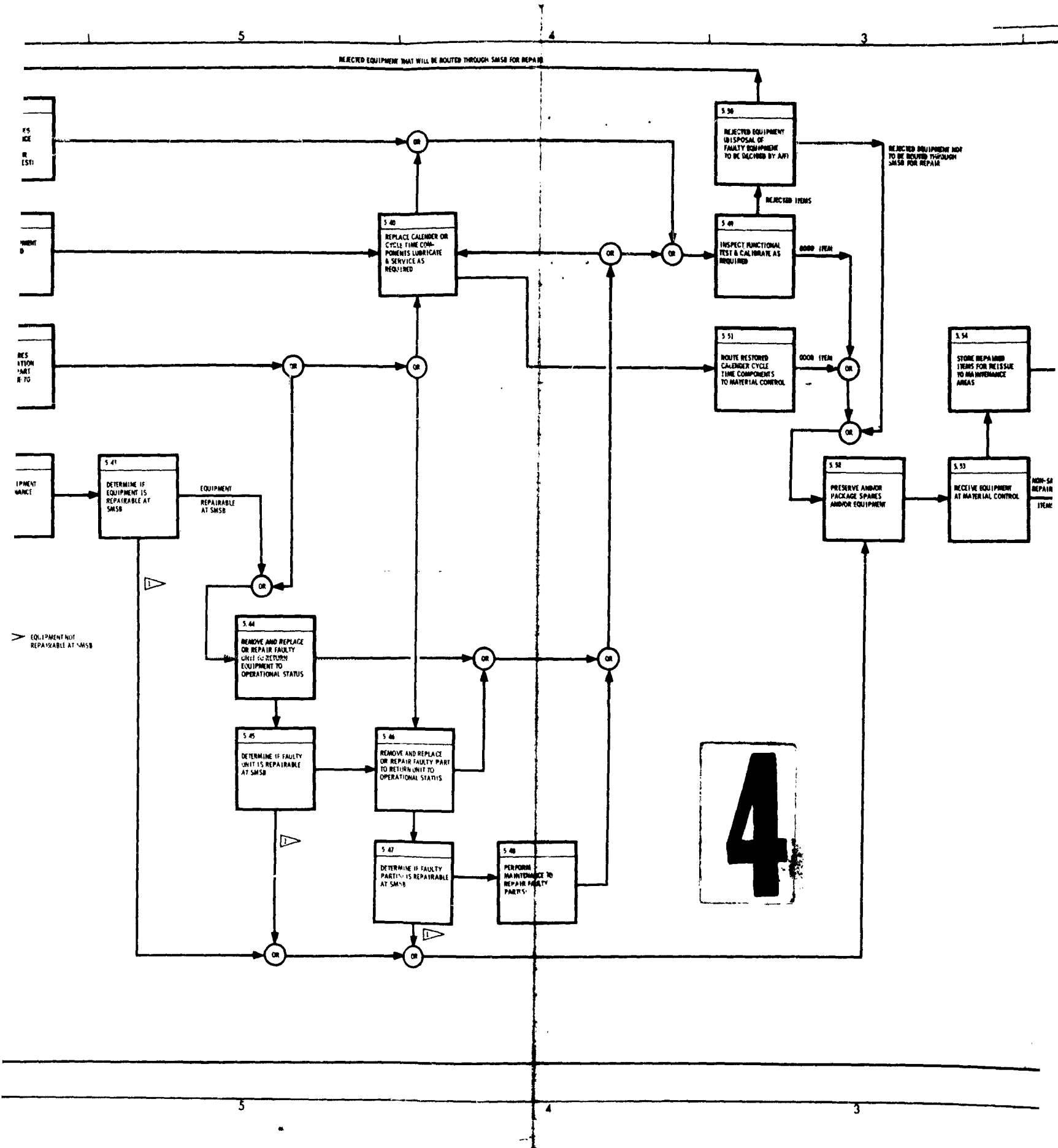
DRAWING PREPARED BY:		MINUTEMAN WING 32	
BOEING		PLAN NAME:	
AERO-SPACE DIVISION		RESPOND TO EMERGENCY	
1-12-43		CONDITION	
1-12-43		SH OF PLAN NO. 4.1	



FORM B

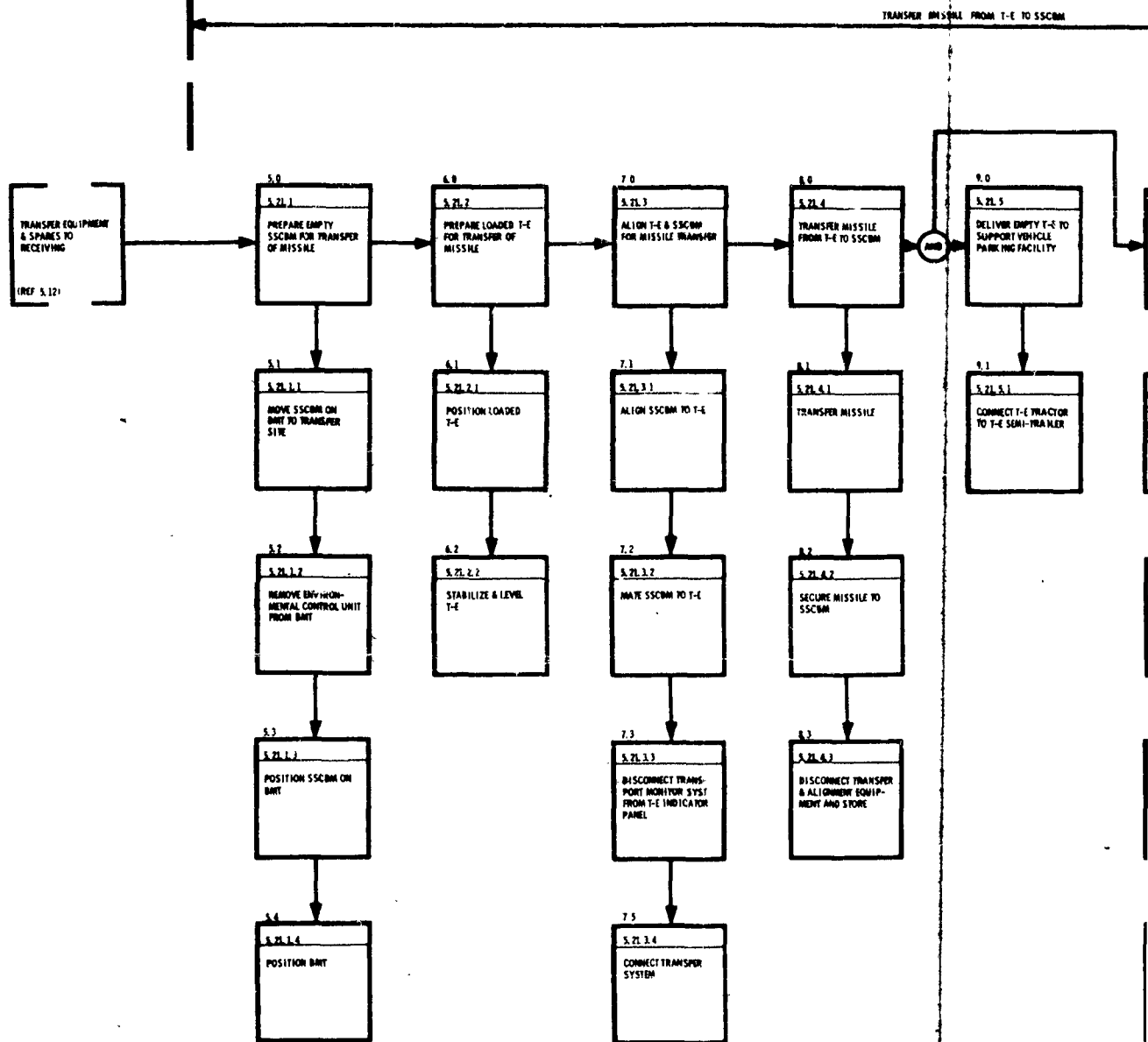






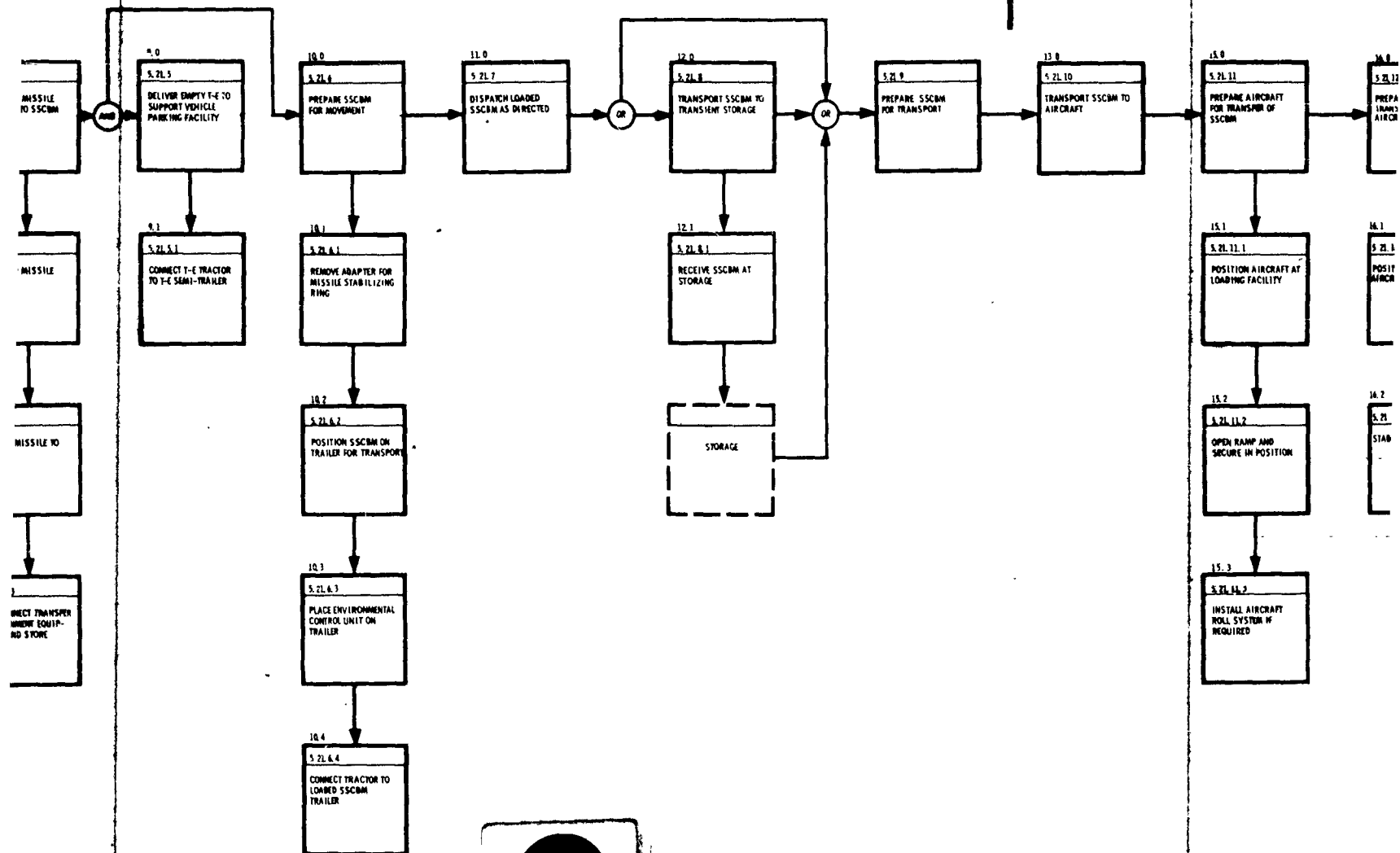
REV SYM C





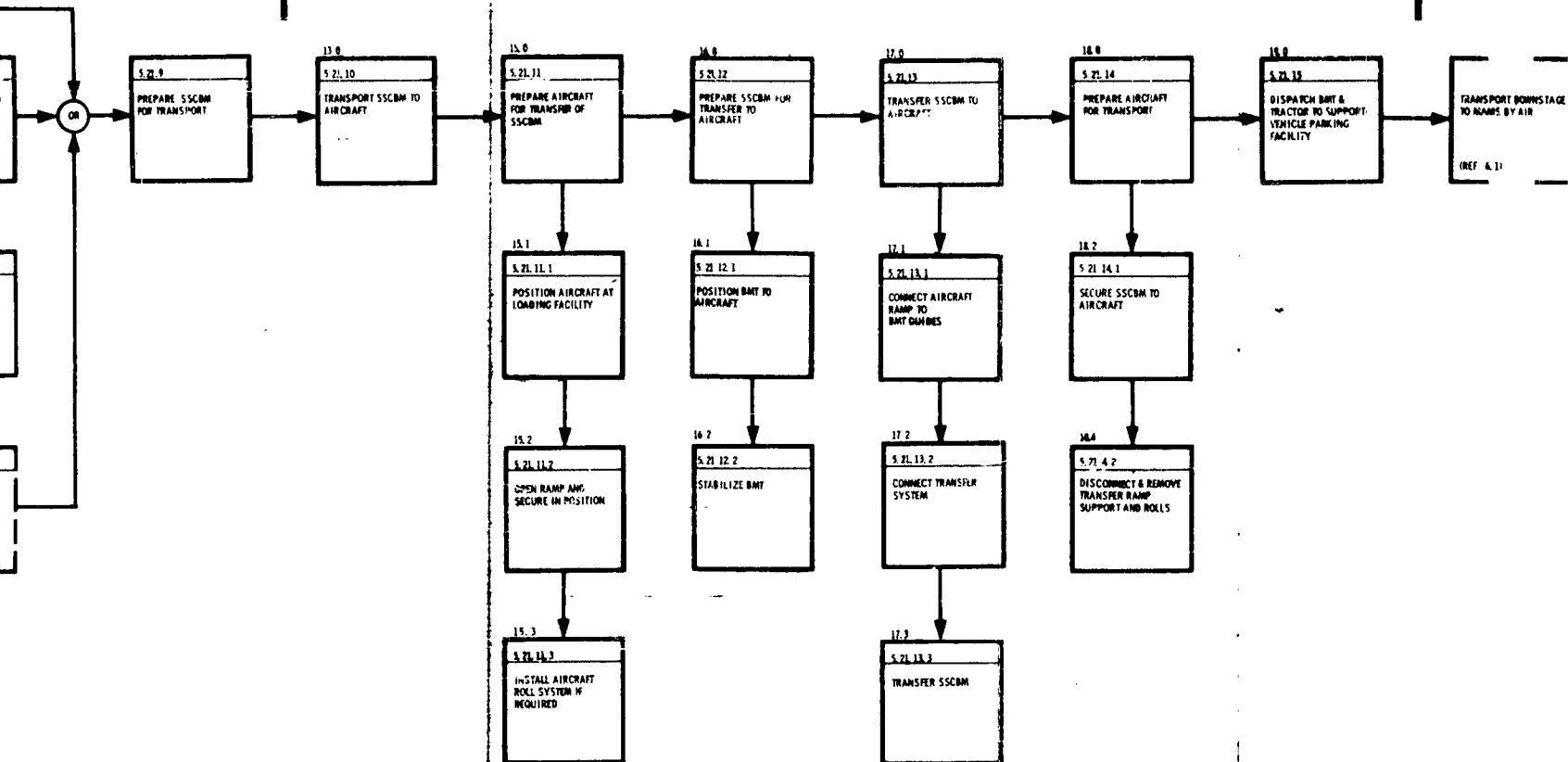
1

TRANSFER MISSILE FROM T-E TO SSCBM



2

LOAD SSCBM ON AIRCRAFT



3

NOTE  
THIS IS  
WING

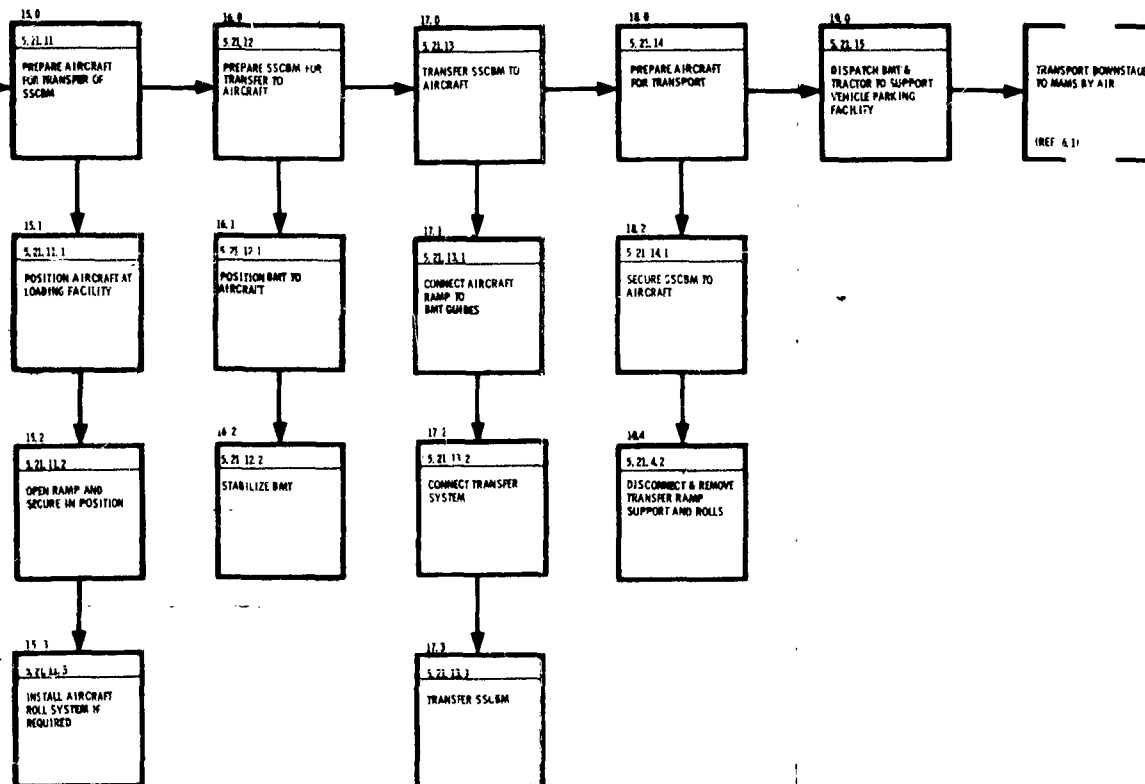
PW  
PUN  
25-3

SECRET

REVISIONS

REV 5X m C

LOAD SSCBM ON AIRCRAFT



4

NOTE

THIS DRAWING IS NOT IN ACCORDANCE WITH ASD FORM 101-42-42 BECAUSE WING 1 FUNCTIONAL FLOW DATA HAS BEEN USED WHERE POSSIBLE.

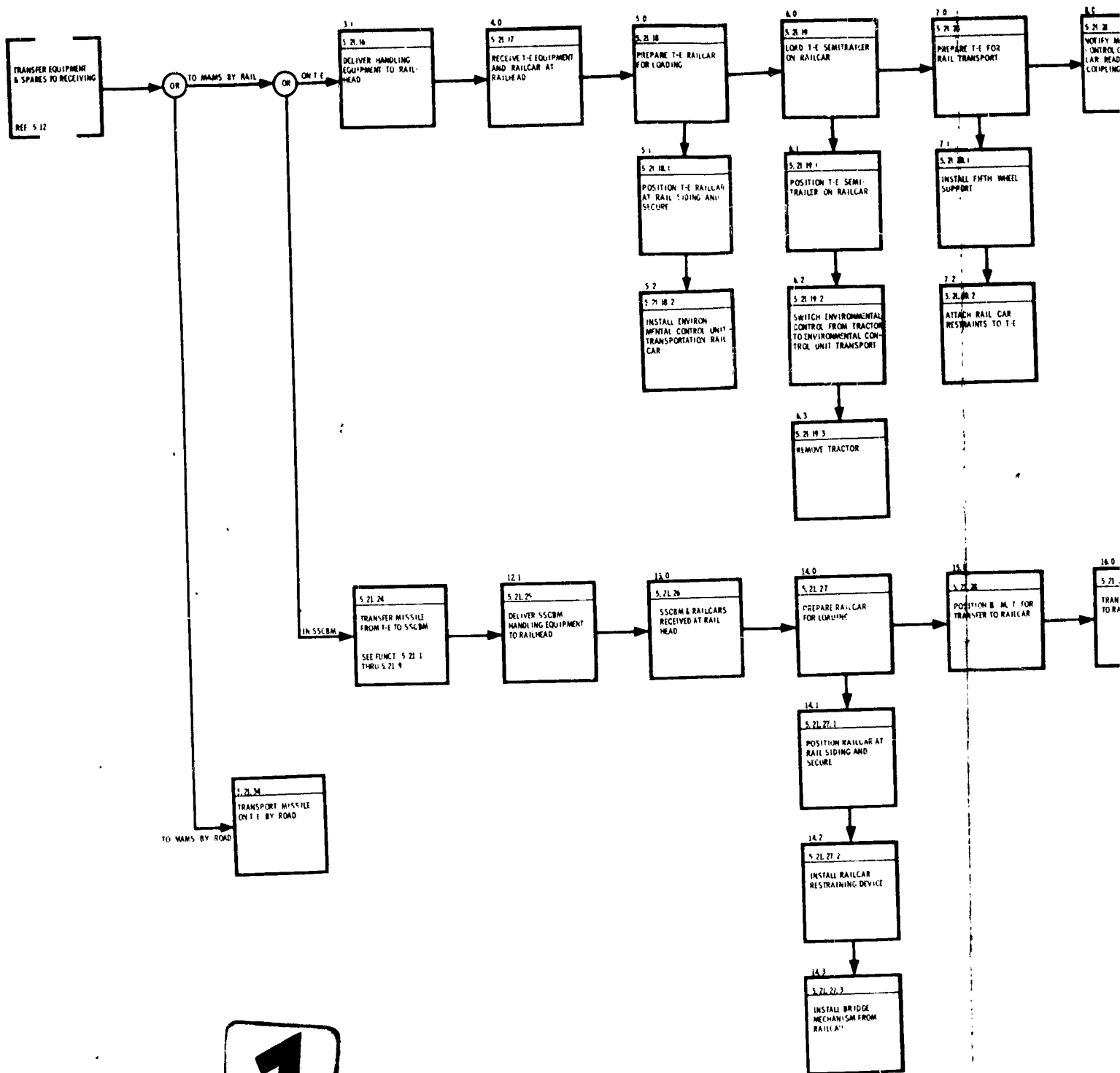
FUNCTION NUMBERS REFERENCED ABOVE  
FUNCTION BLOCKS ARE FROM  
25-10000 SHEET 2 WING 11

BOEING NO D2-30044-1B

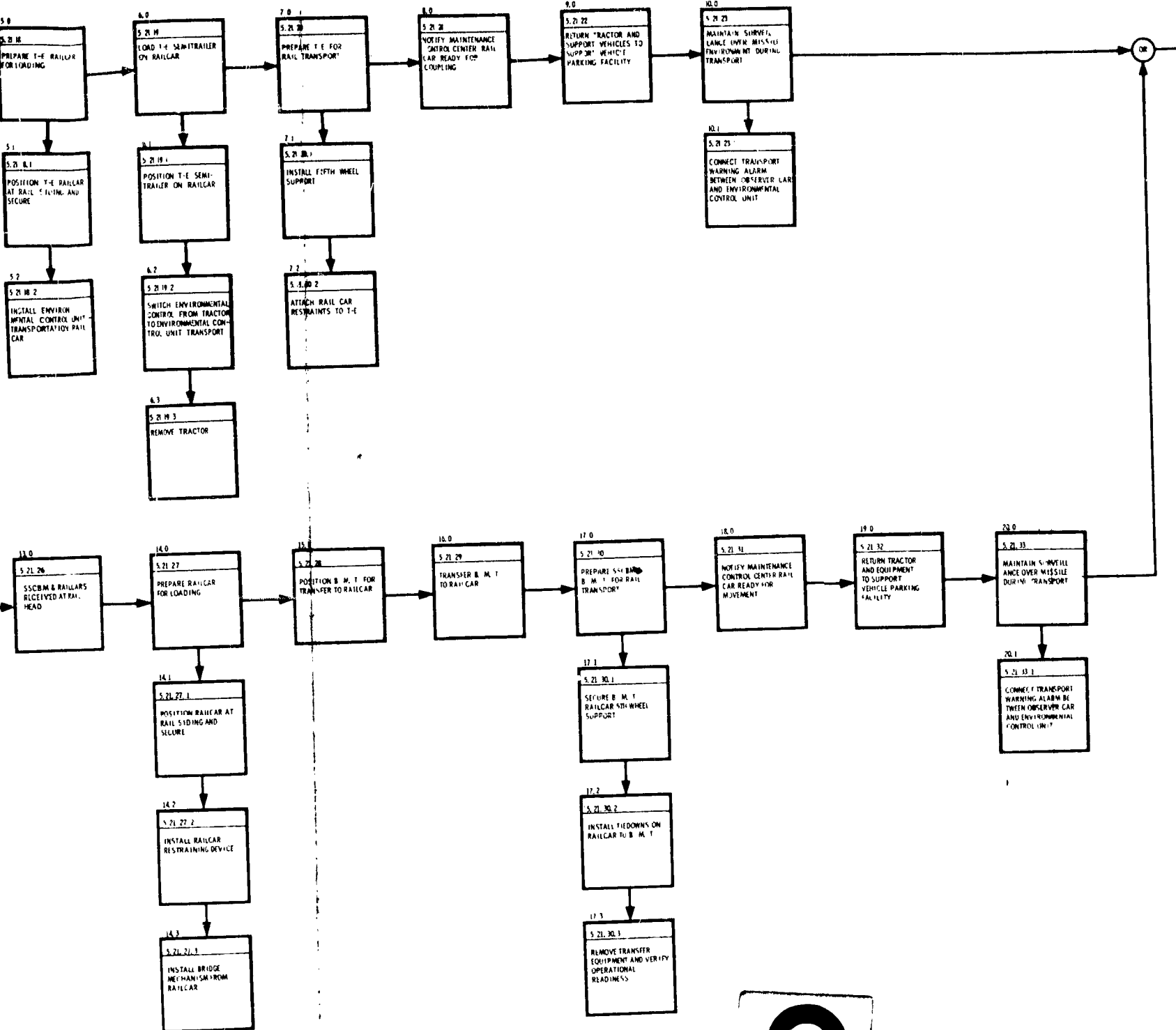
SEC. IV PAGE 45

BOEING		DRAWING PREPARED BY		SERGEANT WING XI	
DIVISION	DATE	BOEING		FLOW NAME	
		AERO-SPACE DIVISION		TRANSHIP MISSILE BOMBING	
				SHEET 2, FLOW NO. 5.21	

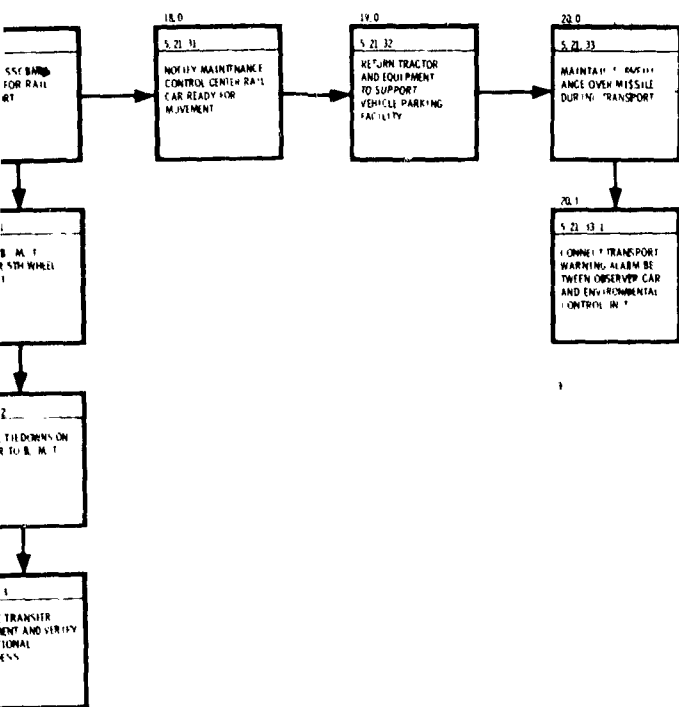
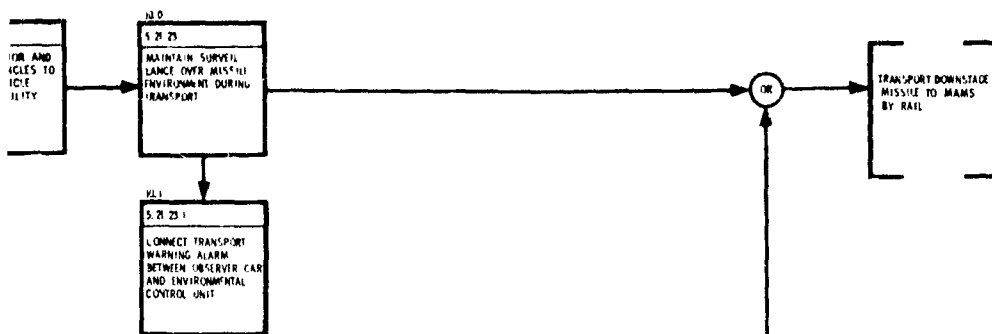
REV SYM C



1



2



3

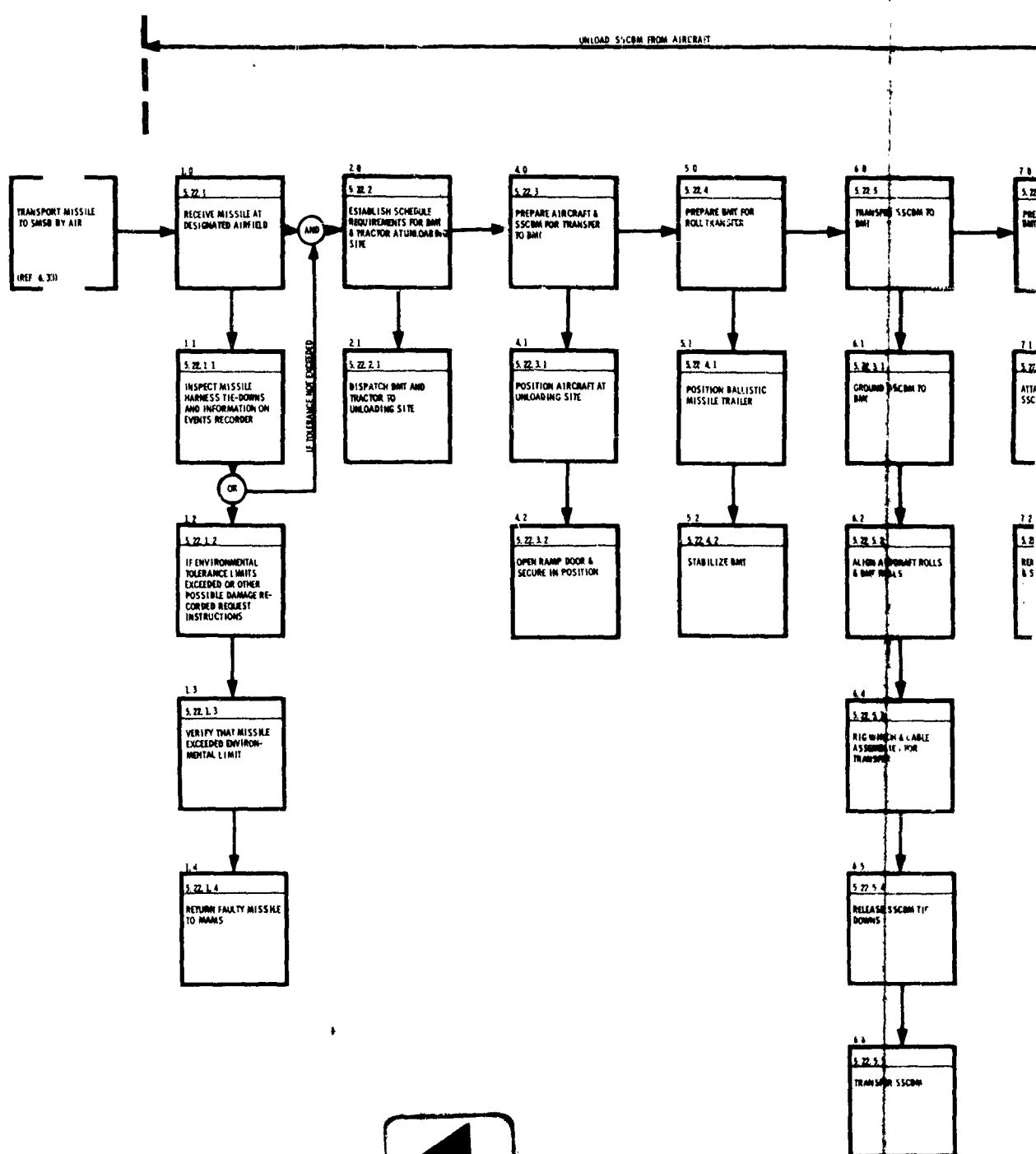
NOTE  
THIS DRAWING IS NOT IN ACCORDANCE WITH BSO EXHIBIT 62-62 BECAUSE  
WING 1 FUNCTIONAL FLOW DATA HAS BEEN USED WHERE POSSIBLE

NOTE: FUNCTION NUMBERS REFERENCED ABOVE FUNCTION BLOCKS  
ARE FROM 25-10004 SHEET 1 (WING 1)

**BOEING** NO D2-30044-13  
SEC IV PAGE 46

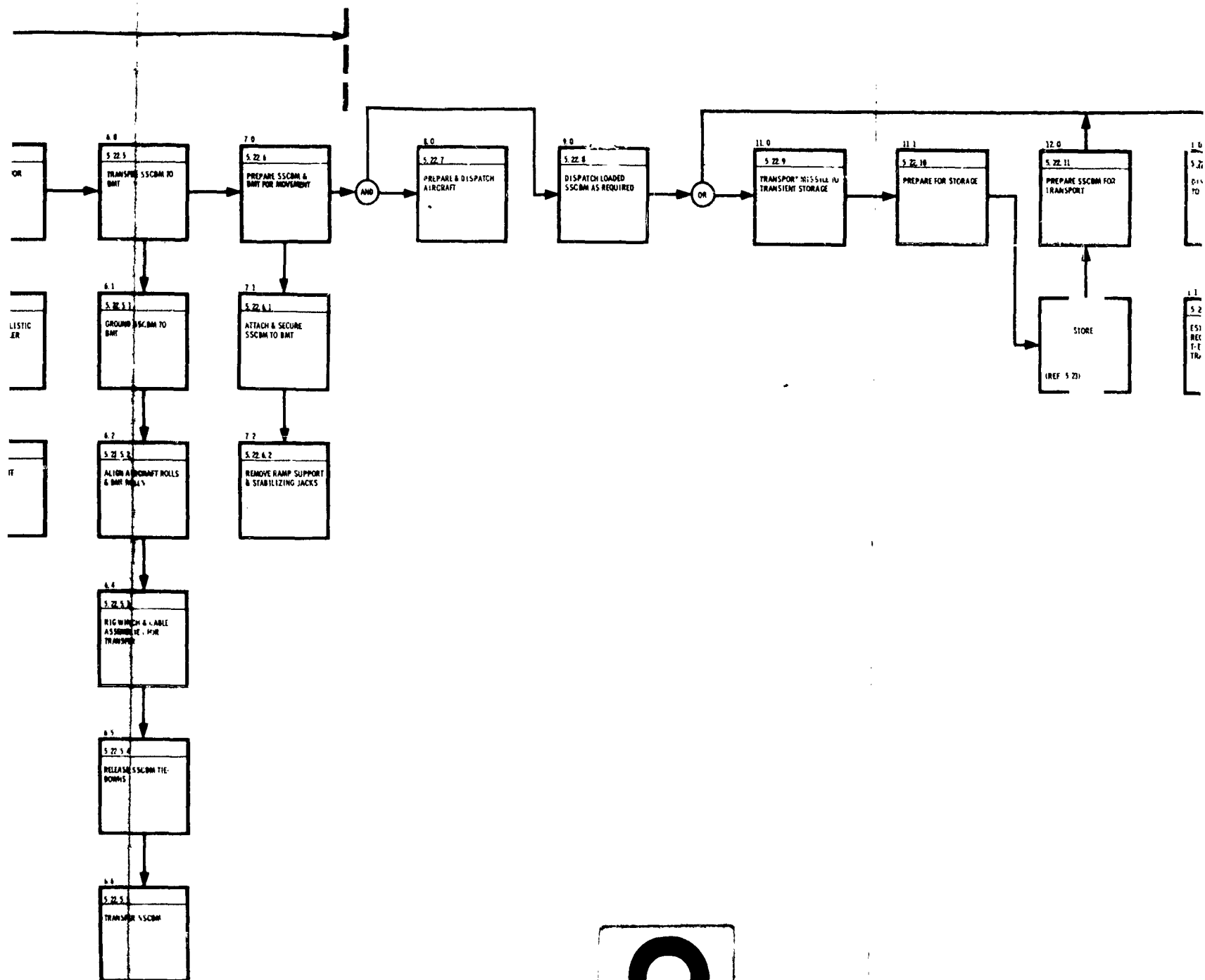
REV ym

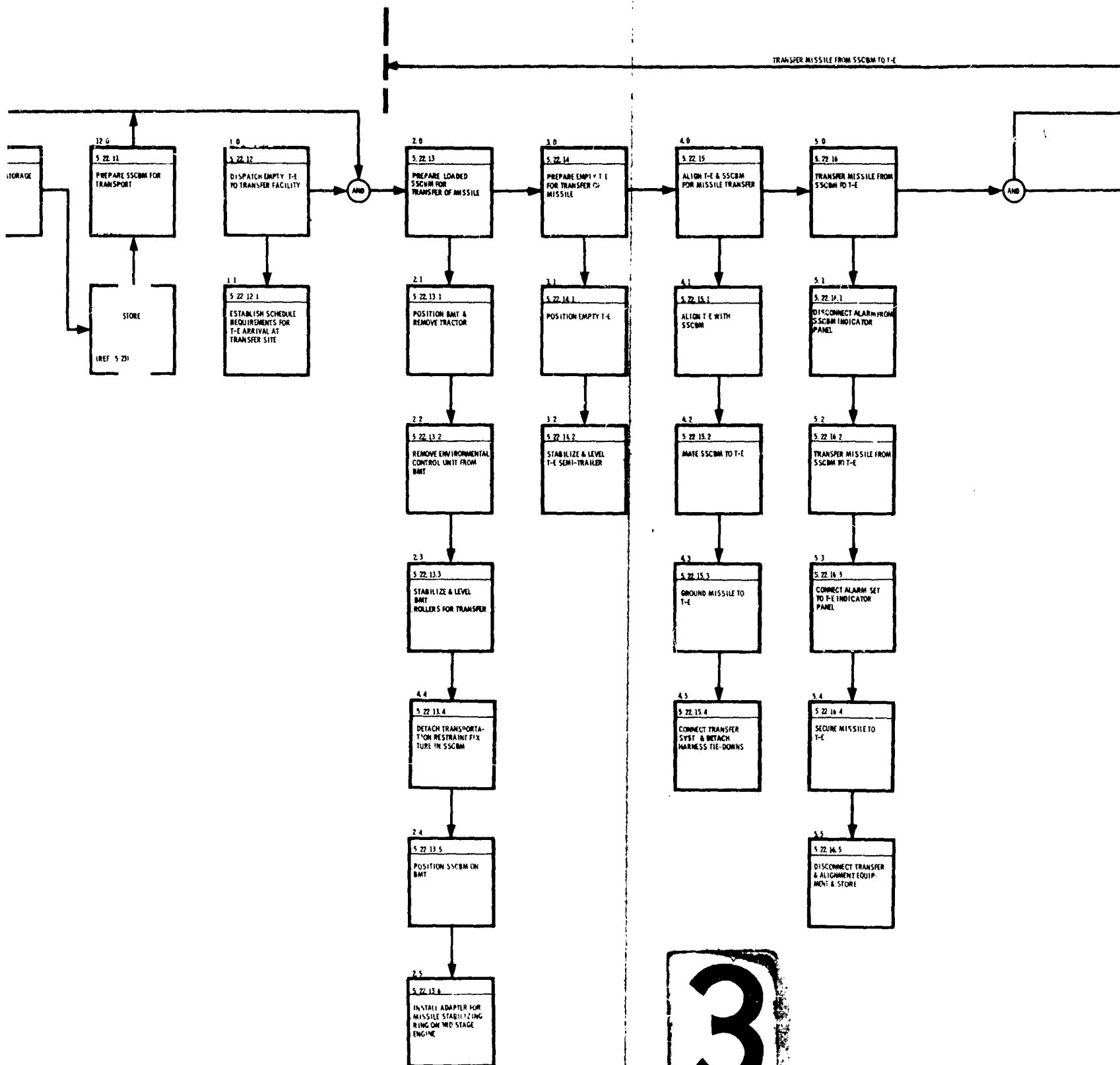
<b>BOEING</b>		DRAWING PREPARED BY		<b>MINUTEMAN WING XI</b>	
REVISION	DATE	<b>BOEING</b>		FLOW NAME	
		AERO-SPACE DIVISION		TRAN-SHIP MISSILE DOWNSTAGE	
		DRAWN	DATE	SHEET 2 FLOW NO. 5.21	
		CHECKED	DATE		
		GROUP	DATE		
		PROJECT	DATE		



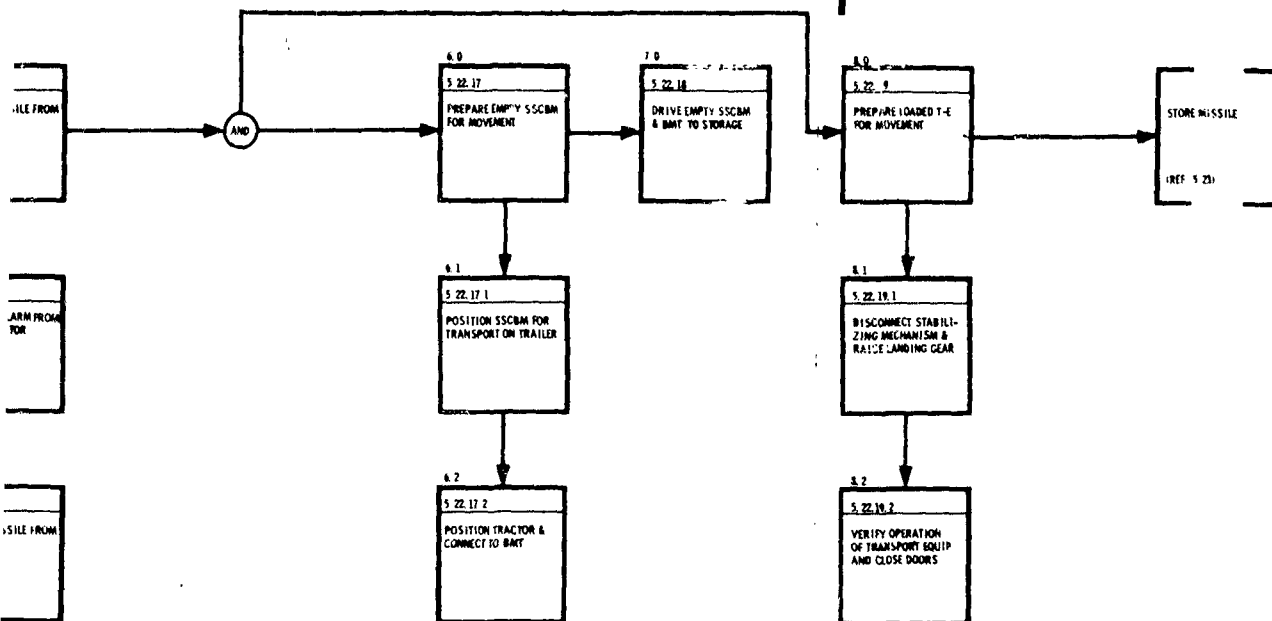
1







BM TO 1-4



4

NOTE

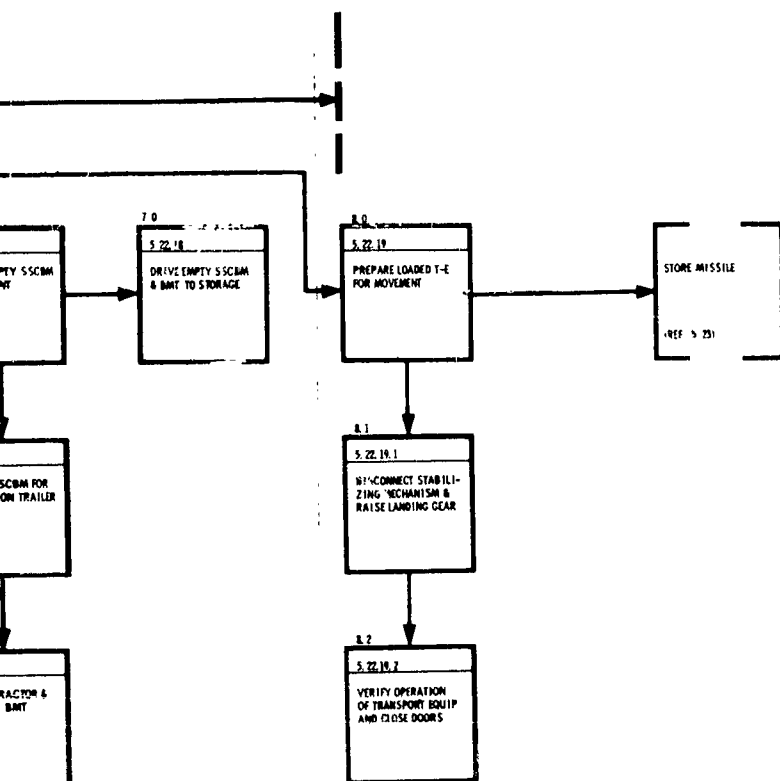
THIS DRAWING IS NOT IN ACCORDANCE WITH BSB EXP1017-02-02 B  
USING 1 FUNCTIONAL FLOW DATA HAS BEEN USED WHERE POSSIBLE

- FUNCTION NUMBERS ABOVE FUNCTION BOXES 5.22.1.1 THRU 5.22.1.4 ARE FROM DWG. 25-10004-1 (WING 1)
- FUNCTION NUMBERS ABOVE FUNCTION BOXES 5.22.12 THRU 5.22.14 ARE FROM DWG. 25-21004-1 (WING 1)

REVISED

NO D2-30044-1B  
SEC IV PAGE 47

REVISION		DATE		DRAWING PREPARED BY		MINUTEMA	
				AERO-SPACE DIVISION		FLOW NAME	
				DATE		RECEIVE MESSAGE	
				PROJECT		FROM NAME	
						SH 1 OF 2	



5

NOTE

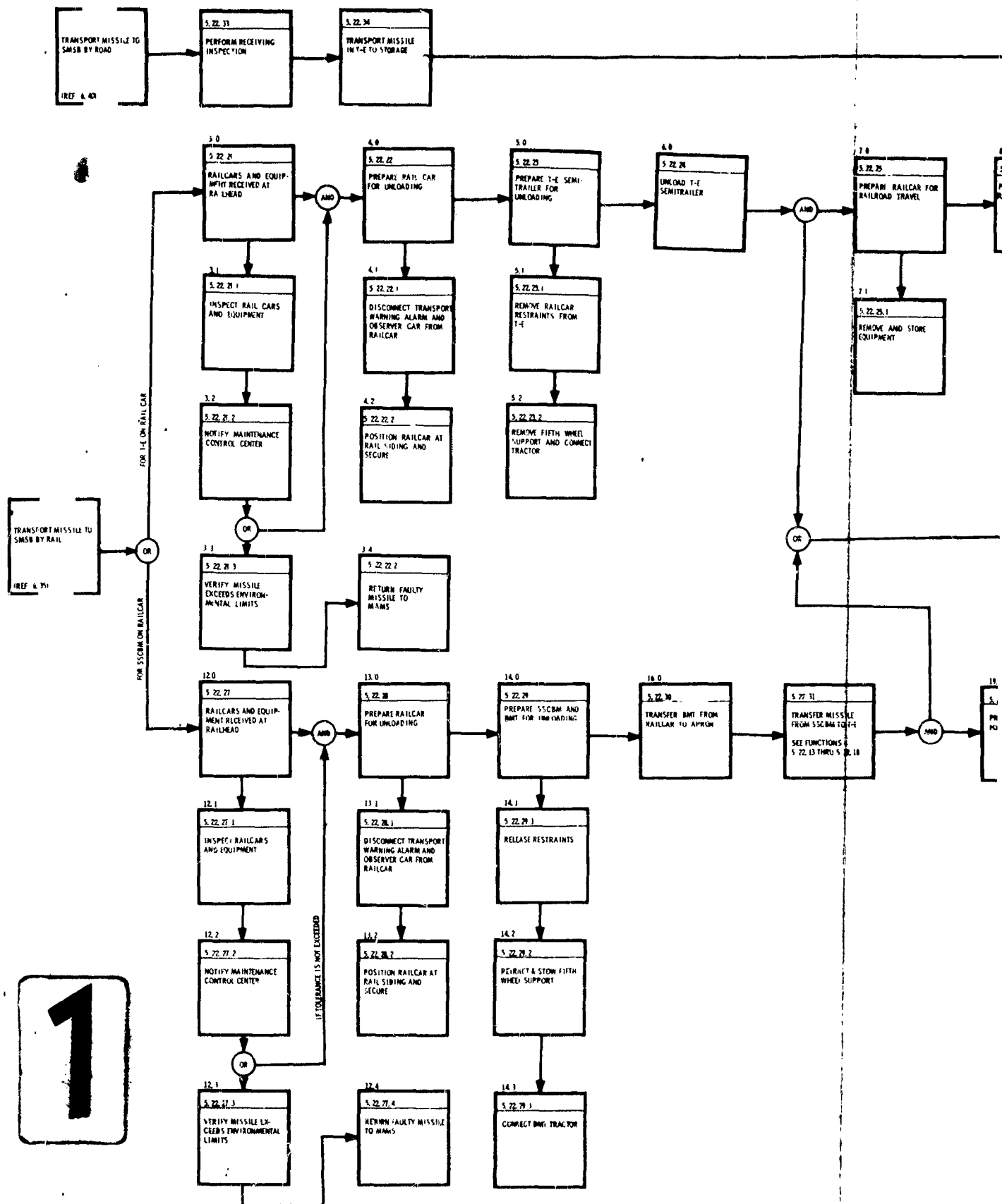
THIS DRAWING IS NOT IN ACCORDANCE WITH BSO EXHIBIT 60-62 BECAUSE WING I FUNCTIONAL FLOW DATA HAS BEEN USED WHERE POSSIBLE.

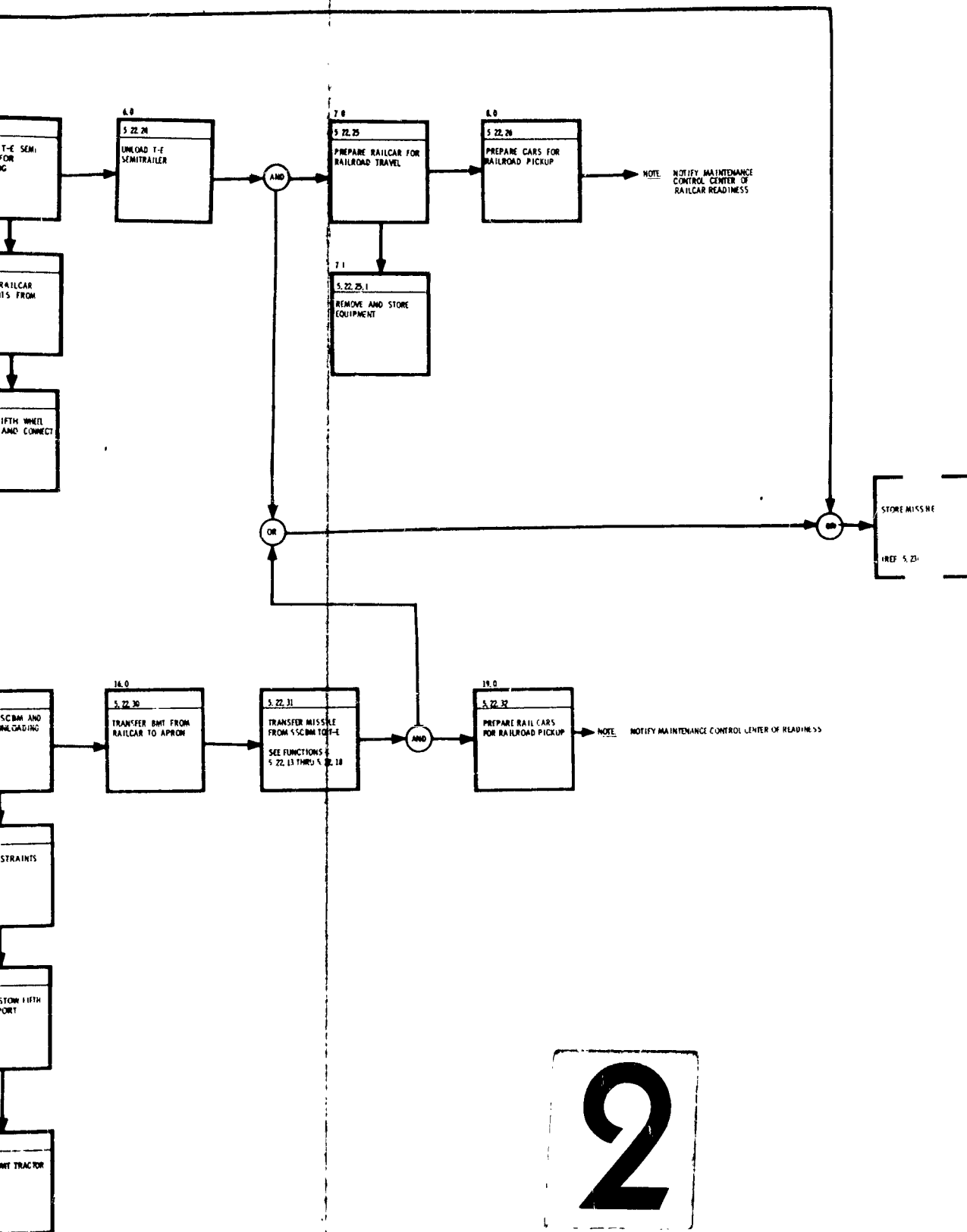
- FUNCTION NUMBERS ABOVE FUNCTION BOXES 5.22.1.1 THRU 5.22.1.11 ARE FROM DWG. 25-18004-SMT-4 (WING I)
- FUNCTION NUMBERS ABOVE FUNCTION BOXES 5.22.12 THRU 5.22.20 ARE FROM DWG. 25-21009 (WING I)

REVISED

<b>BOEING</b>	NO	D2-30044-1B
	SEC. IV	PAGE 47

<b>BOEING</b>		DRAWING PREPARED BY		<b>MINUTEMAN WING II</b>	
REVISION	DATE	<b>BOEING</b>		FLOW NAME	
		AERO-SPACE DIVISION		RECEIVE MISSILE BOWNS STAGE	
		DRAWN		FROM INMARS	
		CHECKED			
		PROJECT		SH 1 OF 2 FLOW NO. 5.22	





NOTIFY MAINTENANCE  
CONTROL CENTER OF  
RAILCAR READINESS

STORE MISSILE

(REF. 5, 23)

MAINTENANCE CONTROL CENTER OF READINESS

3

NOTE

THIS DRAWING IS NOT IN ACCORDANCE WITH BSO EXHIBIT 42-42 BECAUSE  
WING 1 FUNCTIONAL FLOW DATA HAS BEEN USED WHERE POSSIBLE.

FUNCTION NUMBERS ABOVE FUNCTION BOXES ARE  
FROM DRAWING 25-1000A SHY 5 OF WING 1

**BOEING**

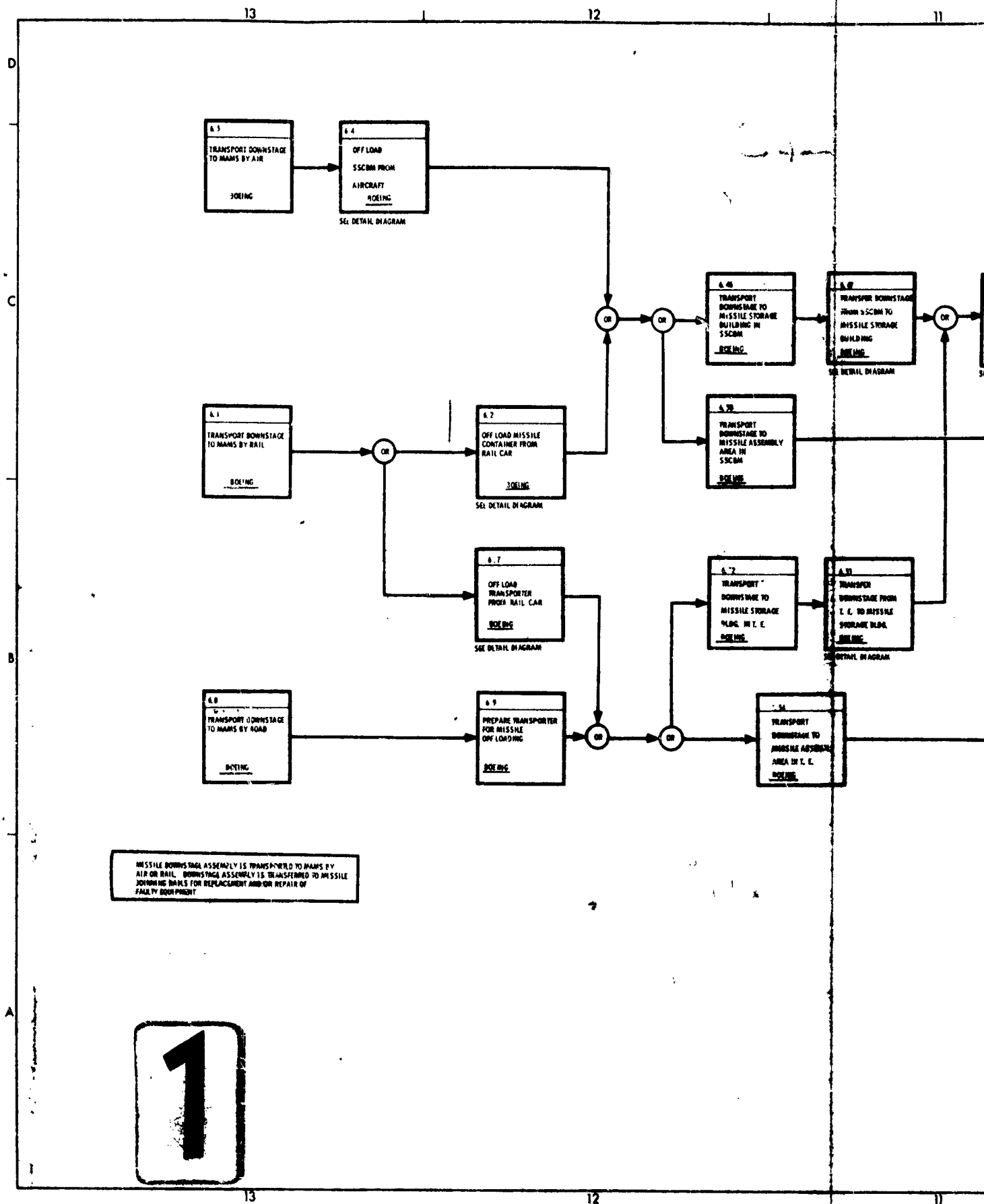
NO D2-30044-1B

SEC. IV

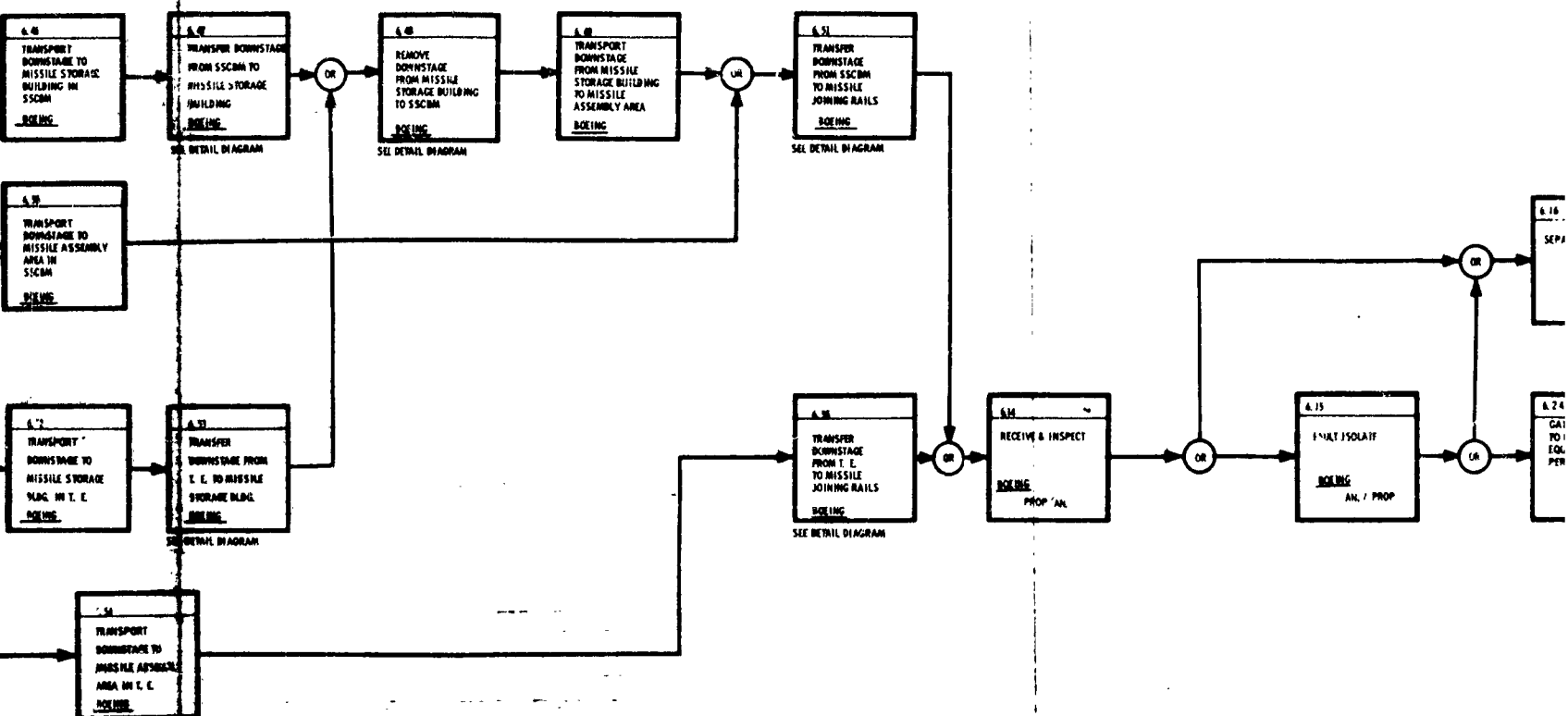
PAGE 48

REV SYM

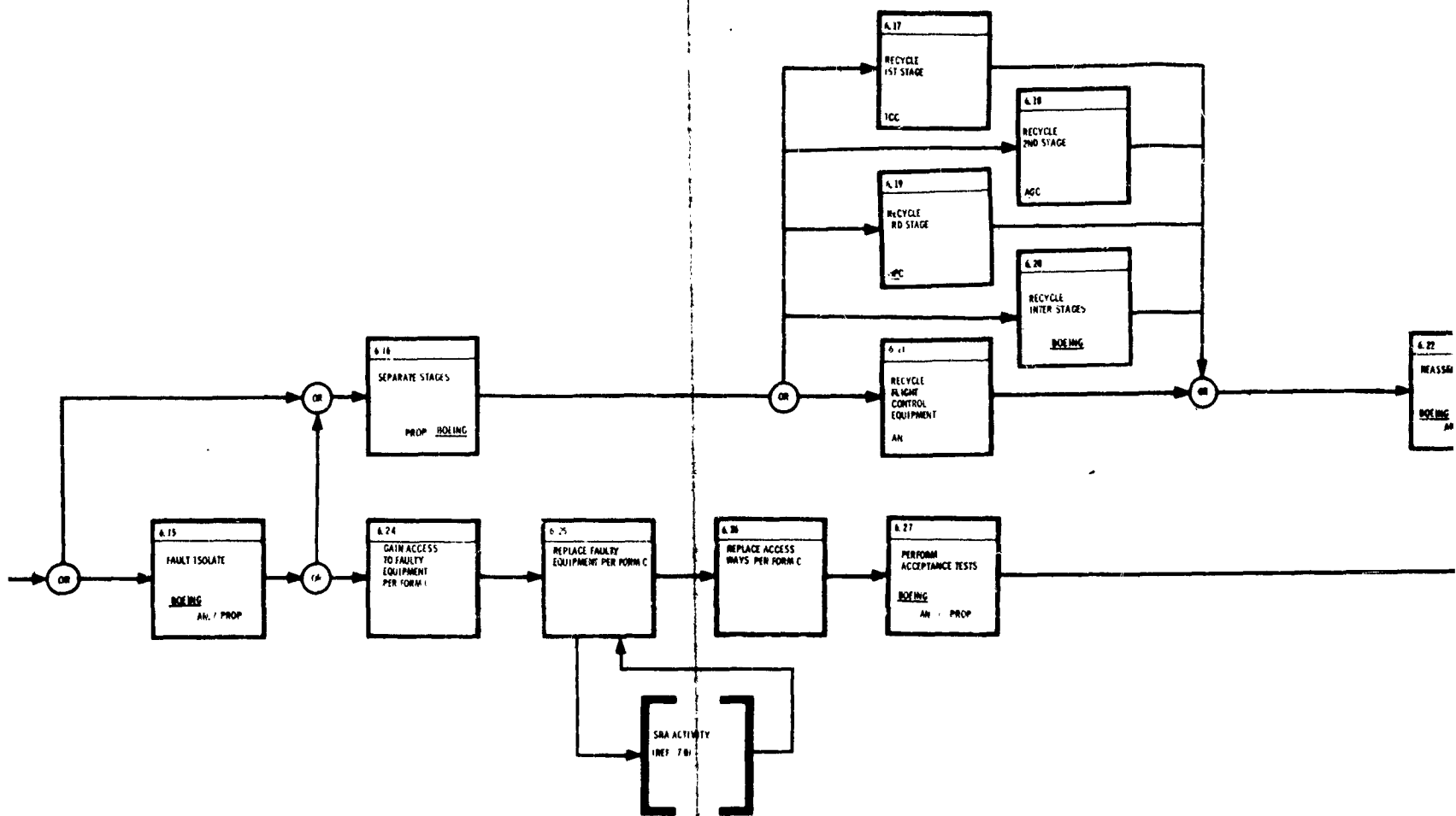
<b>BOEING</b>		DRAWING PREPARED BY		<b>MINUTEMAN WING XI</b>	
REVISION	DATE	<b>BOEING</b>		FLOW NAME	
		AERO-SPACE DIVISION		RECEIVE MISSILE DOWNSTAGE FROM MAAMS	
		CREATING	DATE		
		CHECKED	DATE		
		APPROVED	DATE		
				SH 2 OF 2 FLOW NO. 5 22	







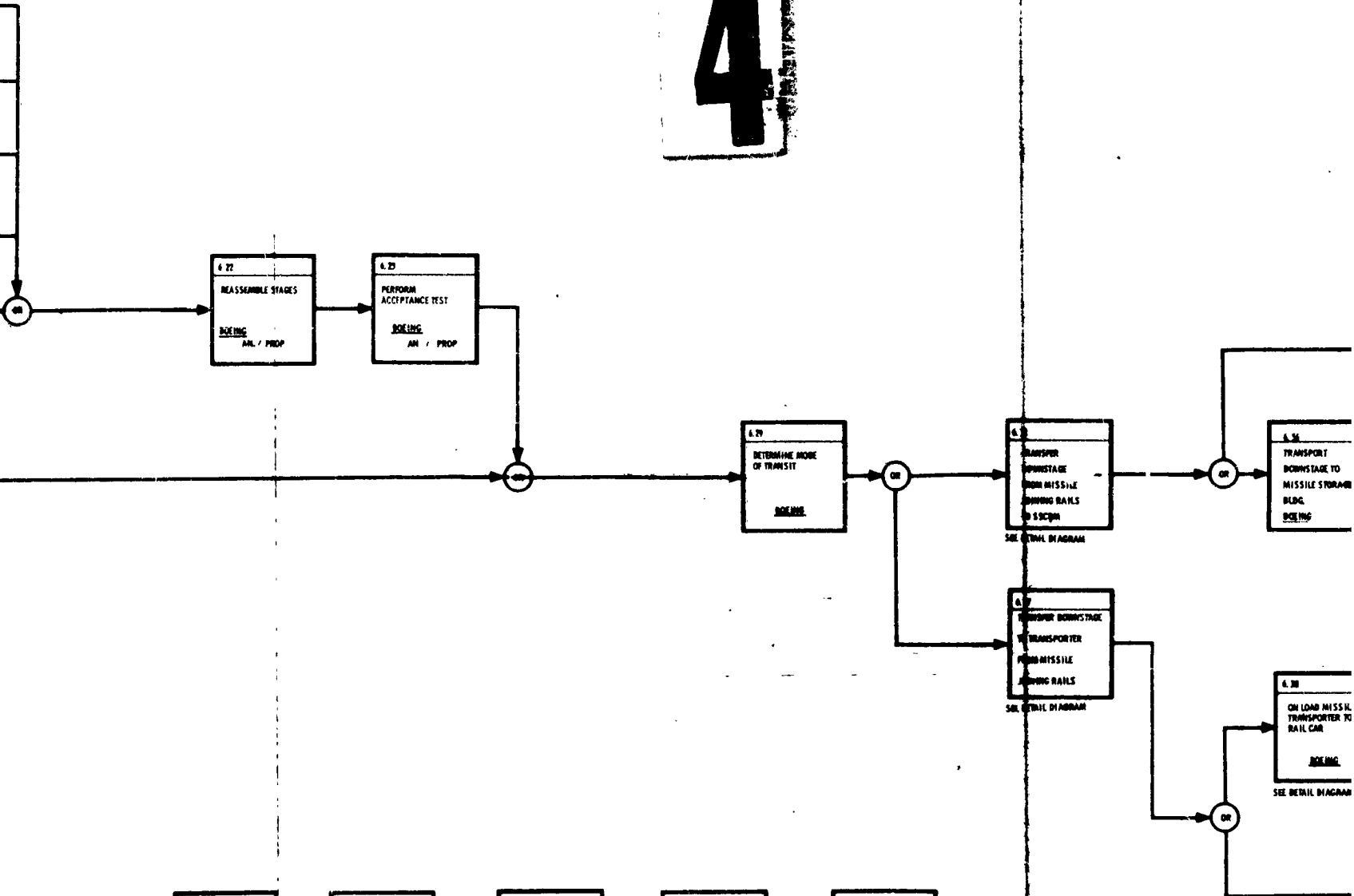
2



3

A.41  
PROVIDE  
POWER  
BOEING  
PROP / AN

# 4



6.41  
PROVIDE  
POWER  
BOEING  
PROP / AM

6.42  
PROVIDE  
ENVIRONMENT  
BOEING  
PROP / AM

6.43  
PROVIDE  
LIFE  
SUPPORT  
BOEING

6.44  
PROVIDE  
SECURITY  
BOEING

6.45  
PROVIDE  
CABLING  
BOEING  
PROP / AM

6.28  
ON LOAD MISSILE  
TRANSPORTER TO  
RAIL CAR  
BOEING  
SEE DETAIL DIAGRAM



